

FUN HOUSE
LUDUS LOCI AND THE AMERICAN HOME AS FOLLY

by

L. David Thomas

B.A., Colorado State University, 1988

M.A., Colorado State University, 1993

A thesis submitted to the
Faculty of the Graduate School of the
University of Colorado in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
Design and Planning, College of Architecture and Planning

2012

This thesis for the Doctor of Philosophy degree by

L. David Thomas

has been approved for the

College of Architecture and Planning

by

Joseph Juhasz, PhD, Chair and Advisor

Amir Ameri, Ph.D

Barry Atkins, Ph.D

Joern Langhorst, MLA

Raymond McCall, Ph.D

Celia Pearce, Ph.D

Date _____

Thomas, L David (Ph.D., College of Architecture and Planning, Design and Planning)

Fun House: Ludus Loci and the American Home as Folly

Thesis directed by Professor Emeritus Joseph Juhasz

ABSTRACT

While play marks both the cultural and pre-cultural spheres of human existence, the environmental design disciplines have almost exclusively compartmentalized the notions of play and fun into categories of leisure and children's playgrounds. The rhetorics of environmental design, to date, have ignored, or at best marginalized, the possibility of play outside of recreational and commercial contexts.

Still, we have abundant examples of playful architecture and fun places that stand outside of the strict boundaries of leisure, recreation and commerce including architectural follies and exotic, whimsical and fun homes.

This project conceptualizes a general notion of "fun architecture" by extracting from research on games a method of critical description of environmental fun. Core to all games is both the concept of environment -- where the game takes place and how the place defines the game -- and the play -- the things that make the game fun. Leveraging the critical language of games, the research provides a study of the American notion of fun architecture through the development of an operational definition of "fun" and then creates a rhetorical bridge between game fun and real places through the application of game concepts to a series of American homes and domestic settings. Taken together, this research illustrates a method and explicates a broad vocabulary of environmental fun.

Case applications of the method include:

- The Winchester Mystery House, in San Jose California, a classic folly turned tourist trap.
- Bishop's Castle in Rye, Colorado, an expressive structure constructed in the folly tradition by a single builder and enjoyed as an anomalous spectacle.
- Disneyland and the representations of home in a themepark setting.
- IKEA demonstrating retail shopping as domestic fantasy.
- Game designer Richard Garriott de Cayeux's Britannia Manor, a traditional residence as a place for play.

Through the application of the critical language of games filtered through environment, to specific domestic sites, this research demonstrates the consistent design and theoretical similarities in these sites as well as provides more precise descriptions as to why we understand each as a fun place, a fun house.

The form and content of this abstract are approved. I recommend its publication.

Approved: Joseph Juhasz, Ph.D

DEDICATION

I dedicate this work to Becky, Sam, Lincoln and Cameron. Thanks for letting me have some fun while writing this. And, of course, to Joe, for seeing the invisible and giving me a chance to make it real.

ACKNOWLEDGMENTS

I would like to thank Dr. Richard Garriott de Cayeux for graciously providing a tour of his home; and to the honorable David Swofford for patiently arranging the details. To both for helping for no other reason for than for the fun it.

TABLE OF CONTENTS

CHAPTER

I. INTRODUCTION	1
Seeking the Place of Fun.....	1
II. FOLLY	12
Considering the Folly.....	12
A Short Historiography of the Folly	13
The Problem with Folly	18
The American Folly (Un)Defined.....	21
Beyond the Folly	27
Utopia.....	34
Theming	41
Criticism.....	43
Architects Having Fun	48
Homo Ludens—Ludus Loci	49
The Language of Fun	60
III. DESCRIBING FUN.....	61
Toward an Architectural Vocabulary of Fun	61
Introduction and Context	61
Games and Ontology/Games and Meaning	62
The Model as Machine.....	69
Game Vocabularies	76
Game Vocabulary Review	80
Building a Vocabulary	99

Conclusions.....	104
IV. METHOD	106
Connecting Play to Place	106
Core Concepts.....	107
Fun	107
Games	108
Play	108
Framework Concepts	111
Caves and Sand.....	113
Types of Games	116
An Environmental Rubric of Fun	118
Formal and Informal Structures	128
Descriptive Terms.....	130
Rules	132
Rules and Environment.....	135
Narrative	137
Narrative and place	140
Player	143
Player and Place.....	146
Entities	150
Entities and Place.....	151
Mechanics	153
Mechanics and place	156
Space.....	162
Space and place.....	164

Games through architecture	166
Games and architecture.....	168
Architecture through games.....	169
Time	171
Time and place.....	178
Goals	183
Goals and place	187
Information	190
Information and place	196
Interface	199
Interface and place	201
Point of view	204
Point of view and place.....	208
Rewards and consequences.....	210
Rewards and consequences and place.....	214
Cultural context.....	217
Cultural context and place	220
Gameplay	222
Gameplay and place.....	223
Synthesis/Conclusions	225
What makes a place fun?	226
V. CASE STUDIES	228
The Fun House in Action.....	228
Home and Work.....	228
The Winchester Mystery House.....	229

Bishop Castle	244
IKEA	259
Story	266
Setting	267
Exploration.....	269
Collection, Manipulations and Puzzle Solving	275
Disney	279
Carousel of Progress	280
The Haunted Mansion.....	287
Mickey’s House	290
Disney at Home.....	293
Britannia Manor	294
Background	295
Features	298
Site	298
Observatory	299
Grotto and Pool	301
Medieval Hall.....	302
The Study	303
Secret Passageways/Secret Space	305
Dungeon	306
The Collections	307
The Automata Room.....	308
The Home as Home	310
Building as Game.....	311

Narrative	312
Interaction	314
Value of the Folly	317
Mark III.....	319
VI. CONCLUSIONS	323
What makes a place fun?	323
Researching Fun.....	325
The Social Function of Fun.....	327
Design	330
The Authentic and Fun.....	332
The Ludic Age	333
REFERENCES	336

LIST OF TABLES

Table

Table III.1 Primary videogame vocabulary terms	101
Table III.2 Secondary videogame vocabulary terms	103

LIST OF FIGURES

Figure

Figure 1: Bishop Castle.....	248
Figure 2: Sign at Bishop Castle	253
Figure 3: Garden of Eden.....	258
Figure 4: IKEA "It's my home" set	262
Figure 5: IKEA Showroom map	264
Figure 6: Britannia Manor entrance, with observatory dome visible.	299
Figure 7: Waterfall and grotto pool	302
Figure 8: The study (viewed from second floor balcony, with Medieval Hall entrance to the top and left and the secret door to the bottom left.	305
Figure 9: The Dungeon	307
Figure 10: Collections in the Space Room, including Garriott's spacesuit from his visit to the International Space Station.	308
Figure 11: Automata Room	309
Figure 12: The Kitchen	311
Figure 13: Britannia Manor Mark III, construction site, January 2012.	322

I. INTRODUCTION

Seeking the Place of Fun

To ask, “Why *is* one place more fun than another?” frames the question at hand. Some places are “more fun” than others in the same sense that some are more “beautiful,” “historically important” or “desirable”. The emergence, of fun, like beauty, comes in many forms: As personal experience, sublime and unexplainable; as social phenomenon and cultural consensus; as legal definition and categories of urban zoning; as expression of political or economic power, scientific force and more.

And, while architectural literature has grappled with questions of beauty, historical value and descriptions of form for hundreds and even thousands of years, the subject of fun does not typically enter the dialog. When it does, fun remains confined to the analysis and theory of leisure spaces and children’s playgrounds. But just as beauty is not limited to the art gallery nor historic importance to the architectural monument, neither is fun a simple characteristic of overt play places—of theme parks and amusement arenas, shopping malls and recreation centers.

So the broader questions of “What is fun?” and “What makes a place fun?” seem self evident and natural, yet we have no ready answers outside of established leisure contexts. Even inside the leisure dialog, fun disappears as a measure or even mode of understanding to be replaced by standards of commercial viability and return on investment, popularity and public reception. But where is the “fun” that people routinely describe and enjoy in places? What has happened to the play that places bring out and the fun they engender?

The absence of substantive research on the question of fun in architecture points to an interesting conceptual gap, and one worth exploring.

Within the study of play, games and fun, while there remains a diversity of ideas about the structure and function of these things in culture, there is a widespread recognition of their importance and ubiquity (Huizinga 1955; Caillois 2001; Sutton-Smith 1997; Bogost 2011). People play and have fun at all ages, in all cultures and at all points in history. The question is never “if play”, but “where is the play?” And while the specific value of the term “fun” will be explored later, the idea that people play to have some form of enjoyment, and that enjoyment often is labeled “fun”, provides a basis for further inquiry.

In terms of human environment, we already understand the importance of fun within the framework of leisure. Judd argues that investment in tourism and related activities remains the largest a city will make in the built environment.(2003). With millions, even billions of dollars channeled into the reconstruction of a city to support leisure activities, such as sports sightseeing and shopping, successful redevelopment can provide economic drivers vital to the health of a city. Imagining New York City, San Francisco, or any major urban environment without tourists, pleasure seekers and people in pursuit of fun robs the city of much of its vitality, and a significant share of its revenue.

In a scathing indictment of the design of contemporary American children’s playgrounds, Solomon levels the most withering criticism by labeling them “an exceedingly dull place to spend time” (2005, 2). In other words, whatever good playgrounds might have in a community, when they are dull, when they are no fun, then they cease to function correctly.

Cedric Price's "Fun Palace" stands as a clear call to indeterminacy, fancy and play in a serious structure (Mathews 2006). Likewise the Hundertwasser House in Vienna (Restany and Hundertwasser 1998), the Hang Nga Guesthouse in Dalat Vietnam (Bell and Lyall 2005) or Madeline Gins and Arakawa's home East Hampton, N.Y (Bernstein 2008) are obvious examples that speak to fun or play in their design, the program and, ultimately, in the use of each space. Likewise it is impossible to view the LOVAG habitation's undulating rivers of bubbles (Alison and Barbican Art Gallery. 2007), Michael Jantzen's angular puzzles (Jantzen 2012), the science fiction rings of Bart Prince (Mead, Prince, and Penhall 2010), or Bruce Goff's organic compositions (Goff et al. 1995) without seeing something fun nestled inside the serious architectural design discourse.

These examples, from the world of professional architecture only scratch the surface. Homes carved out of rock or built from seashells, constructed to look like flying saucers, ducks and medieval fortresses tease the viewer and promise a play and delight not apparent in more idiomatic home designs. And while many of these personal, unusual homes merely provide a façade attached to more conventional home interior, others carry the exterior fun and play through the entire plan and program of the building.

Much as Huizinga (1955) argued play underpins the most fundamental aspects culture and sublimates it so deeply as to appear in such serious pursuits as law and war and as Sprioso detects a growing ludic theme in contemporary science and philosophy (1989) likewise we can inquire, "Where is the fun in architecture?" The answer comes confidently, "Everywhere."

What remains is to better understand the place of fun in its non-leisure aspects of human environment. (Borries, Walz, and Böttger 2007) Much as Venturi and Scott Brown asked the design disciplines to learn from Las Vegas, a new area of scholarship now asks us to learn from games.

Ultimately, questions about the relevance of this subject might best be put into the context of Castronova, who points out that the rise of digital worlds will continue to entice people out of the harsh reality of daily life. That is, if our environments do not become more pleasant, and playful, we may find the lure of the digital fun too great. (2007)

Yet outside key leisure contexts, architectural dialog appears largely mute on the topic of fun. Building a fun work place, a fun school or a fun house rarely enters into the conversation. Architectural theory, it seems, has little to say on the topic of fun.

At the source of this descriptive absence we find what Brian Sutton-Smith has aptly described as the “ambiguity of play.” (1997) The play concept, he argues, exists inside a series of complimentary, and often contradictory, rhetorical contexts. Different audiences evoke play for different purposes—to show how play advances children’s development (the rhetoric of progress) or how cultural groups use play to reinforce a common bond (the the rhetoric of identity), for example. The play concept, then, exists enmeshed within a set of rhetorical contexts. The dialog of place outside of leisure and recreation, however, has resisted engaging the full spectrum of the rhetorics of play.

If this ambiguity finds a place in architectural discourse it is in the discussion and attempts to categorize and describe the architectural folly.

A widely recognized architectural category, the wide diversity of form that falls into the folly category appears to defy categorization. The term folly has been used to describe uncompleted castle projects (Hubert's Folly), Romantic and picturesque gardens (Stourhead), sculptural oddities (Watts Towers), amateur building projects (The Winchester Mystery House) and even structures erected from unorthodox building materials (Rhyolite, Nevada Bottle House). One must remark at both the startling range of things thrown into the folly category, but also of the immense number that have landed on the folly heap.

The folly conundrum provides a starting point based on a simple premise that some order underlies the diversity of folly forms. And from this point, many key questions erupt. Is the folly category as undefined as it seems? Is folly simply an outside to the orthodox inside of architectural theory? Does labeling something "folly" remove it from the center of architectural theory without completely deleting the place from architectural discourse? And if so, why have the folly as a category at all? Why not simply define the indefinable as "not architecture" and leave it at that?

In the following chapters, I work to solve the conundrum of the folly by situating it as an outside to the inside of orthodox architecture, then justifying the outside category as one organized around the concept of fun.

The review of the folly literature traces, then, the faint outline of an alternative history of place sketched by the notion of fun. Necessarily veiled, if not completely hidden by serious history writing which requires the exclusion, or at least the marginalization, of practices considered trivial, silly or non-serious, fun places dissolve into a-historical artifacts. Ultimately, these fun places, these follies, demand a serious history to be set outside of.

Fun architecture, as folly, clarifies the non-category, the category of the uncategorizable. Once this non-category has been organized and examined, the next step attempts to produce a clear description of the notion of fun, its relationship to play and embodiment in games. The study of games, then, becomes the mechanism for framing and contextualizing the folly as a category of fun, rather than merely as one of architectural exclusion.

The claim that an understanding of games can speak to architecture in general appears tenuous at first. Some architecture clearly supports play and games—such as the sports stadium and gymnasium. But outside these specific contexts, the notion that games would influence architectural understanding does not appear self evident.

Chapter three provides a conceptualization of games as both a medium of entertainment, in the sense of a machine for generating fun for its participants, and of games as a model machine for understanding the world. In the case of the game used as machine for generating fun, the review of literature demonstrates how a definition of fun derived from Sutton-Smith's notion of the ambiguity of play and Gregory Bateson's notions about the nature of play clarify the notion of game. Further, the idea of a game as a model machine for understanding the world provides the next step in the argument that games embody a method for understanding fun. Ultimately, games are seen as machines, play the use of the machine and fun the result.

By abstracting a language of fun from the study of games, this research proposes its most novel contribution that the vocabulary of game criticism also provides a method for creating a general language of fun. The next methodological move provides some preliminary bridgework elaborating the language of games in such a way as to make it relevant to the language of architectural understanding. This effort helps close a rhetorical gap—one born of a lack of language and terms, rather than one of fact—to recontextualize the notion of architectural fun. Along the way, the image of the folly is rehabilitated, but not necessarily brought back inside the mainstream of architectural thought. Again, we return to the notion of exclusion—fun is the rhetoric of what is outside, the rhetoric of the unspeakable that speaks.

With this tentative method in place, the research turns toward application. To further focus the question of “What makes a place fun?” the study narrows its subject focus to an area of the built environment that has proven largely immune to the capitalist tendency to strip leisure from work, play from life—the home.

The home, at least in the West, has a precarious relationship with both the notions of work and leisure. The notion of leisure at home does not appear to exist as a visible cultural construct until work has been cleanly separated from the domicile. At this point, leisure can be described by the absence of work—the not work of the home. Because even as the work concept was largely segregated from the home during the industrial age (Williams 2000) and leisure turned into a producible commodity set aside on its own (Debord None), the home remained a site for domestic labor as well as relaxation, comfort, pleasure and play. Rather than act as a neutral ground between productive labor (work) and leisure (not work), the home became a place for domestic work and expressive play.

The home, at least in its Western, and certainly American, context mixes work and leisure in a manner that does not follow the more starkly drawn lines of the work/play or work/leisure dichotomies employed in current theories of environmental fun as “not work = leisure”. In this sense, the home is neither strictly a work nor leisure place. It sits in an other space, outside of work and commoditized leisure and therefore, a perfect place to site a study on fun, of play. Outside of the work/leisure constructs, the home offers a conceptual playground for constructing a new theory of environmental fun that do not anchor in terms, and therefore rhetorics, of either current concepts of work or not-work (leisure). The home, then, remains a contrasted space between work and leisure, a stage set and ready for the performance of new actions. A key performance, this research suggests, it as a site for fun.

Looking at the home as fun site, or fun house, works to bring play back from the margins of architectural discourse and to provide the concept of fun an engaged context within it can establish architectural aesthetics. At the very least, the collection of case study sites demonstrates the value of the development and use of an architectural vocabulary of fun in reaching more precise insight into the nature of fun places.

The five case studies collect a selection of sites, each chosen for some unique aspect of its combination of the notions of the domestic and the fun.

Since 1923, Llanada Villa has gone by a more auspicious name, the Winchester Mystery House. A popular tourist destination, the rambling 160 room mansion attracts visitors from all over the world to view the home and hear stories of ghosts and occult practices. One of the United State's most recognizable folly homes, the Winchester Mansion provides a perfect starting place for re-examining the notion of the folly, and looking at how the Mystery House functions as a tourist attraction, promising fun from a historic site and unusual home.

Turning from the historic folly to a present day work, Bishop's Castle in Rye, Colorado fulfills the classic notion of a folly. Castle builder Jim Bishop has labored since 1969 to construct a massive stone keep for no apparent reason other than his desire to see it built. Modeled as a home, and as the project of an auteur architect, the castle demands attention as a fun house that stands without residents or obvious amusing intentions. Where the Winchester mansion was turned into a crowd pleasing tourist site after its owner died, Bishop's Castle sits as a fun house even while it is being built.

The next case study steps away from actual homes and deals, instead, with the image of the home. As one of the world's largest and most successful furniture and home furnishing stores, IKEA presents a well-crafted and intentional domestic fantasy. Undoubtedly, the IKEA system of presenting this fantasy works. By looking at the IKEA shopping experience as a form of architecturally-driven fun, this case study provides a new dimension to the understanding of the IKEA success formula.

Similarly, reviews of three specific attractions that have entertained guests at Disneyland provide another approach to the question of the image of the home outside of the strict domestic boundaries of the house. How Disney has treated the image of the home in The Carousel of Progress, The Haunted Mansion and in Mickey's House provides valuable linkages between the vocabulary of fun and the recognized master of environmentally designed entertainment.

Finally, the case studies conclude with a capstone example. Videogame designer Richard Garriott de Cayeux home, Britannia Manor Mark II, resembles a castle and is filled with esoteric collections, veined with hidden passages, secret rooms, trapdoors and occult catacombs that demand attention beyond kitsch, folly or idiosyncratic architecture. Garriott himself provides insight into his home as both fun architecture and as his residence.

Connecting these disparate homes inside a descriptive framework of environmental fun provides a context for understanding their genetic similarities and differences, baring the possibilities of a method of environmental understanding of fun and work to answers questions about the purpose of exclusion at work in architectural discourse of the fun house.

Consideration of these topics ultimately casts light on the notion of a *ludus loci*, of an inherent play of a place.

By creating a rich context for the extreme, unusual and playful nature of idiosyncratic American homes, this research offers a means by which designers can engage in the notion of fun as a design goal, knowable and attainable.

II. FOLLY

Considering the Folly

A faux ruin on a hill, a house built from telephone poles or a store built to look like a shoe. As soon as architecture runs into the unusual, it often finds itself tagged with the appellation “folly.”

The Oxford Dictionary of Architecture describes the folly as an “Eyecatcher, usually a building in a contrived landscape, often otherwise useless.” This definition, while a popular usage, ignores the many follies that also function as art, as tourist destinations and therefore as commercial enterprises or, key to this research, as a home. The definition continues to gerrymander other purposes when it elaborates, “(M)ore often it simply demands attention and gives pleasure by its eccentricity.” This extension to the original notion appears to contradict, somewhat, the notion that a folly lacks function. Finally, the definition allows for a more generous assessment of the form. “More recently, the term has been given to buildings that are out of the ordinary, do not conform to any of the recognized styles and are not necessarily placed in a landscape.” (Curl and Sambrook 1999, 249)

The folly, as a category, starts out in opposition to its own classification. It is useful uselessness, functionless function and anything that does not conform, which could be everything. The UK’s Folly Fellowship founder Gwyn Headely notes: “It is easier to define what a folly is not, rather than what it is.” (1996, 1)

As a starting point, this ambiguity in definition points less to a lack, than to an opportunity. Mark Wigley’s point that “Architectural discourse is clearly defined more by what it will not say than what it says” (1992, 329), signals the direction. If the folly

opposes definition, that is, it does not speak for itself, then the goal of this review of literature targets the general historical conundrum of the architectural folly and its specific application to the American home. Nominally a whimsical piece of eye-catching architecture or landscape linked with the Romantic and Picturesque movements of the 18th century, the term “folly” has come to encompass designed environments both historically and typologically uncategorizable, or at least, uncategorized. How then do we define the indefinable? What does the silence of the architectural folly say about architectural discourse?

To suggest that the architectural folly lacks a literature exaggerates the case, but only slightly. Abundant in built examples, the folly has only a small collection of books and articles that treat the subject with any historical or critical depth.

This apparent absence creates further complexity when geographically constrained to the United States and the typology of the American home.

The freakish, the idiosyncratic, the bizarre and the fantastic find seemingly countless expressions in American homes built in every geographical region possible, by the rich and the poor, the playful and earnestly serious. But architectural theory and history barely does more than note their existence.

A Short Historiography of the Folly

“The history of architecture has always been inextricably joined to theory, criticism and design,” states Antony Vidler (2005). Any history relevant to architecture, he argues, must share its concerns with the theory and practice of architectural design.

Or to put it another way:

“The historian and the architect are one and same person.”(130)

This insight into the orthodoxy of architectural history and theory provides an entry point to explain why the folly, a global and ubiquitous form of fanciful architecture, has so little standing in most architectural dialog. The folly lacks an architectural history because in most cases, it also lacks an architect. As a result, short of simple histories, told in series of assumptions and cataloged in collections of examples of things that “just don’t fit”, the folly drifts inside proper architectural history, an assumed anomaly.

As a result, looking at the follies literature we can trace a faint outline of an alternative history of place and, at this point, assert that the underlying organizing principle of this history is the notion of “fun”. Necessarily veiled, if not completely hidden, by serious history writing which requires the exclusion, or at least the marginalization, of practices considered trivial, silly or non-serious, fun places dissolve into a-historical artifacts. Likewise, fun places themselves demand a serious history to be set outside of.

Or as Diana Agrest suggests, for there to be an inside to discourse there must be an outside. In terms of the mainstream of architectural thought, she defines the inside as a “the system of architecture,” or “the body of rules developed in the Renaissance, that, as a reading of the classics, established the foundations for Western architecture....” (2005, 27). While her concern is how what is left outside this system is repressed rather than simply excluded, her conceptualization of an outside history naturally calls for a counter-history of exclusion, repression or both.

So what of this outside history, the excluded or repressed folly? Vidler provides the most authoritative attempt to reconcile the all too real presence of buildings and structures labeled “folly” with the established norms of architectural

history (Archer et al. 1983, 10 -13). In Vidler's summary of the accepted view, the folly originates as a term, concept and historical event in the middle of the 18th century with the rise of the Picturesque and the Romantic. The faux ruin was both a discrete narrative element that spoke to a rational architecture built of meaningful parts, each with discrete epistemological referents, and poked every unnecessary spire and tower into the eye of the pragmatic rationalism of the Enlightenment. So the folly progressed in this mode as a form of sexual and political liberty, a temporary escape, or at least necessary contrast, to the tyranny of reason. While serious building was meant to speak its purpose or at least bow to classical and rational concepts of structure, the folly spoke to an unspeakable purpose, as a site for libertine action and as the emblem of political liberty itself.

This liberty of form and desire created an architecture of possibility, but also a kind of material oblivion. If a building could be anything from a Greek Temple in the British countryside to a Chinese Pagoda on a gentleman's estate, then the folly represented the destruction of the authentic (or at least a disregard for it). In the modern age, the mass production of image for the market accelerated the folly forward as a form of cultural appropriation, the product made for market—like a World's Fair Pavilion that displaced the foreign, packaging it as an export for display.

In the final phase of its place in historical meaning, the folly became, as Vidler described, "essential."

"The folly of each individual became his truth and meaning; it was represented as an abstract structure of interdependences." (1983, 13)

In a word, the folly became "psychological."

And while this summary of the folly in Western history provides a linkage between the folly and the professional practitioner, a rationalizing of the folly in terms of the Enlightenment-through-modernity rhetoric that frames contemporary architectural history dialog, it does not come to terms with pre-Enlightenment follies, non-Western follies and the emergence of the American folly, a tradition broken from its roots in the English folly, eventually established in forms as exotic as the Long Island Duck (1931), the American castle, the House on the Rock (1959), and on and on and on. This is to say, in an effort to mediate the notion of folly back inside the system of architecture, Vidler misses or discards much of the folly history. His description of the history of the folly remains willfully incomplete, however useful it is in other ways.

Conrads and Sperlich tackle this head on in “The Architecture of Fantasy: Utopian Building and Planning in Modern Times”. (Conrads and Sperlich 1962) They argue that a view of history which sees the electric variety of threads through the nineteenth century coming together to produce the architecture of the mid-twentieth century remains a reductive and potentially facile view of architectural development.

“Doubts about the validity of such an approach motivated the present book which is, actually, a collection of what had to be discarded in order to arrive at an orderly definition of present architecture in terms of certain theories....If one ventured to construct a really complete picture of the architecture of this century, it would have to include phenomenon which do not correspond to the better-known, universally recognized trends which for that reason have usually been ignored.” (6)

To point in terms of the current project:

“(These excluded buildings) have been considered superfluous, passing fads, and frequently have been pronounced pathological. To preserve the orderly classification, impulses of architectural fantasy were branded as freaks.” (6)

Sitting squarely outside the system of architecture, excluded and isolated in its own trivial category, the architectural folly finds that its exclusion from the mainstream

system of architecture is more relevant to its cultural role than in its marginalized state inside the orthodox view as summed by Vilder.

For example, while Barbara Jones, in her encyclopedic index of British follies clearly sees the link between folly and the Romantic and Picturesque ideals, she does not find this context adequate to contain all forms of folly building:

“...some follies owe very little to the romantic movement—the impulse to build a high tower for the sake of the prospect certainly shows admiration for the picturesque, but some of the towers are such eyesores, so dully pedestrian, with such small windows and enclosed summits, that the prospect theory must be discarded. Towers of this sort are hardly romantic; they enhance no view and commemorate nothing, they are merely the result of a desire to build a tower, a pleasingly simple opposite to the equally Freudian desire to dig a very long tunnel.” (Jones 1974, 1)

In other words, despite Vidler’s attempt to rationalize a building form he admits is a “figure of unreason”, we see a gap in this very historical practice that can neither deny nor comprehensively catalog the form.

By considering the instrumentality of historiographical approaches in thinkers such as Herodotus, Ranke and Nietzsche, with the focus on records of great deeds, people and states, we can read the idea of follies as a category of the non-category. In this view, follies exist outside of traditional categories of historical importance, the system of architecture, and the folly disappears as something intentionally non-architectural and intentionally a-historical.

“...most follies were designed by amateurs. Some amateurs know by instinct all that art can demand, but generally the compulsion under which an amateur builds, whether it is fashion or obsessions, fails to instruct him in the principles of architecture and his mind leaps back to building-blocks, forgetting every piece of architecture he has seen since he played with them...” (Jones 1974, 38)

Or, as Conrads and Sperlich propose, this non-category may actually point to a more fundamental category of architectural meaning.

“Important and logical tendencies and trends begin to appear, and occasionally one might even feel that these so-called freakish ideas are concerned with something much more fundamental—and perhaps much more important—for architecture of the future than the exquisite over-refining of accepted and already perfected forms.” (6)

The question remains—if the architectural folly is more than simply a category of exclusion from the system of architecture, then what organizes the members of the folly set?

The Problem with Folly

Sidelining the folly from the system of architecture ultimately results in the splitting of architectural theory on the subject. The category “folly” becomes a stand in for non-functional as well as whimsical and unusual building forms.

An example of the consequence of this split can be viewed in the anthology “Follies: Architecture for the Late-Twentieth-Century Landscape”, compiled by B.J. Archer (Archer et al. 1983). This exhibit and companion book focused on offering top architects and architectural visionaries such as Bernard Tschumi, Peter Eisenman and Michael Graves a chance to work without the programmatic constraints of time, budget, client or site. The resulting gallery exhibit and catalog illustrates how easily professional architecture can absorb the idea of the folly, while eliminating much of its playful freedom and often amateur naiveté while still adhering to the system of architecture. The designs in the book are impractical from a programmatic or construction engineering perspective. But they are still architecture well within the system of architecture, protected and elaborated by key contemporary architects.

Archer sees no irony in this approach. In fact, he uses Vidler’s summed history of the folly to construct a bridge from the Romantic English era straight through to the post-

modern architecture of the early '80s. Archer emphasizes that the participants selected for the exhibition were among the first generation of architects to experience Modernism as history, and thus were able to both reflect on that history while avoiding notions chained to historical progress. In other words, the folly becomes a viable focus of the architect, freeing design from the classical orders and from the idea that architectural thought and practice evolved with teleological purpose. The folly, un-motivated outside the imagination of the folly builder, works as an emblem of a new freedom for the contemporary architect.

“Implicit in the notion of the union of the architect and the folly builder is the desire for escape—for ordered rather than mindless flight—if only to the end of the garden. For the architects, there is the pleasure of creating an object which embodies no function, save for demarcation, or is useful only for a small segment of daily life. For the possessor, the pleasure of a journey to a special place—albeit in his own domain—may satisfy an inward yearning after deplaning from the Concorde.” (Archer et al. 1983, 8)

What Archer, with Vidler's help, attempts to do is to resituate the folly as a form of architectural pleasure, but not of architecture itself. Meanwhile, the study of the folly and the folly itself moved away from mainstream thought, becoming an idiosyncratic non-architectural thing, even as the number of folly buildings continued to grow.

As a repercussion, the folly is set outside of its own history and remains defined by its exclusion from the system of architecture rather than by a discrimination of what makes it unique and whole as a category on its own.

In this way, Archer avoids the central question: How do we define the indefinable? But this omission may come from belief that it is not possible to even bottle this genie. As Headley notes:

“[The folly] is a minefield for the ambitious academic. The properly trained architectural historian needs to verify the context and category of buildings, to know where they stand in the order of things. Follies, however, are riotous

and undisciplined, seductive and irrational. They are going to cause problems. Architectural historians need to know dates to place building in stylistic context, and they need to know the architect in order to place the work in his chronological resume. Follies do not provide milestones or landmarks in personal development. They are one-hit wonders.” (Headley 1996, 2)

The problem of the folly, then, rests in the apparent contradiction of the architectural category defined by exclusion from the orthodox system of category, but not the exile from architecture entirely. Rather than say, “The folly is not architecture,” in the same way that we might say stacking soup cans in the grocery or piling laundry in the hall is not architecture, the folly is instead allowed a position of exclusion. Architecture cannot dismiss the folly, but it cannot embrace it fully either.

And within the study of folly itself, the category bristles at attempts to define. As if taking its cue from the mainstream of architectural thought, the folly category delights in its idiosyncratic and eclectic collection of buildings.

Of course, the problem of the folly rests on two resolvable, but as of yet unresolved, issues. First, a review of the folly in all its forms reveals more connective tissue than simply the class of exclusion. Collecting together fantastic, fantasy and visionary architecture alongside the folly paints a more nuanced picture of what the folly category is capable of. Second, the argument here claims that the delight which infuses the folly category can be interrogated and better understood. Eventually, this research will argue the delight of the folly is better understood as the play of the architectural designer and the fun of its use.

The American Folly (Un)Defined

Defining the architectural folly from a historical perspective becomes troublesome simply because there is no appropriate historical framework to contain the diversity of folly building. In response, folly scholars have taken to assembling representative collections of folly structures and inducing a category from the collection. Often these collections are geographically bound—such as key anthologies that focus on the folly in the United Kingdom or, more specific to this research, the United States.

What sort of categorical statements do scholars of follies make about these collections of examples? How do you define a folly when comes time to write a book?

In her classic reference work of British follies, Barbara Jones attempts to characterize the eclectic collection of structures that dot the United Kingdom, many birthed from the Romantic era that Vidler depicts, but many coming from other times and contexts. She notes:

“More mood and emotion are built into follies than into any other kind of architecture, so the good ones are not good in the manner of ordinary buildings. Normally emotion in architecture is expressed professionally in a distilled and controlled way, within a framework of mathematics and engineering and sometimes commonsense or a client’s wishes...architecture tends to evolve steadily on the basis of tradition.” (Jones 1974, 1)

Here she points to one of the salient features of a folly, it’s “un-professionalism” or perhaps better, its “non-professionalism.” In other words, one of the key markers of a folly appears when orthodox architectural theory and practice, the system of architecture, retreat to allow the construction of something that simply does not fit. Even more, to fit it would require unfitting the entire system

As she sums, “Follies are personal in a way that great architecture never is. Their amateur quality makes them our own....” (Jones 1974, 1)

This sketched picture suits the English conception of the picturesque folly. However, once the form finds its way to the New World, it takes on new connotations. In some respects, the folly develops its more contemporary meanings in the fertile soil of the emerging American culture

Clay Lancaster wrote the first large scale attempt to classify, catalog and describe the American Folly in 1960. Even though many of the buildings he described had been destroyed or torn down by the time he compiled his work (and many more have since faced extinction), he found ample examples of a particular form of folly that was distinctively American.

To best understand the specific sense of the American folly, Lancaster worked to sketch out the conceptual development of the term, “folly”.

“The word ‘folly’ has undergone a number of changes in interpretation throughout the ages, especially as applied to constructions. It seems to have come from the French *folie*, which originally meant ‘delight’ or ‘favorite abode.’ There are said to be houses still existing in France that bear the antiquated epithet *La Folie*.” (13-14)

This claim provides an interesting anchor for the term—from the beginning it was about a particular kind of personal pleasure, or delight, and even more so, one attached to the home. As public life during the Enlightenment eased into a new found privacy (Rybczynski 1987), we find that the home is set aside, a tributary of the mainstream culture. So while the home reflected a cultural norm on the façade, it allowed for a difference on the inside. Rybczynski describes this new idea as “comfort”, but clearly it derives from the same place as Lancaster’s “delight”.

Lancaster goes on to link the notion of folly in its more common usage to Hubert's Folly (c. 1200), a castle project attempted near the Welsh border and ultimately razed for political reasons. Thus, folly entered into the English language and tradition combining the French notion of delight, with the pragmatic perspective of being something impractical, not thought out and victim to more powerful forces.

As Lancaster points out:

"The two meanings of the word 'folly' now had an English denotation." (14)

Noting that the two meanings of folly survived inside the concept, the more rational and pragmatic, and unfortunately pejorative, sense of the term—the English view—began to dominate the more romantic ideal. "Strictly speaking, 'folly' has come to refer to any costly structure considered to have shown folly in the builder." (14)

He continues:

"Nowhere have buildings been labeled follies more liberally than in America. Here a folly was a building offensive to the sense of good taste and restraint, or simply one out of key with its neighbors in size, style, or planning." (14)

This connects with the particularly American obsession with the façade, and the demands of appearance. As an English colony, America absorbed much of British pragmatism. In some sense, the use of folly as a descriptive term was as a derogatory mechanism to bring the façade back into hegemonic stylistic order.

Even if the term was an epitaph of scorn, the continued presence of the folly as an American building type belies the idea that all folly was foolish.

Lancaster also breaks the American folly tradition from the English by considering how the more fluid class structure of the American social system provided a open opportunity for anyone with the resources to build a folly. "The building of

architectural follies was not restricted by class distinction to grantees, princes, kings, and emperors in the New World as it had been in the Old,” he claimed. “In democratic America the field was open to everybody, and many availed themselves of the opportunity to indulge in it.” (43)

The diversity of sources of wealth in America, from the shipping magnate to the plantation farmer and the shrewd banker or businessman, allowed many to amass the financial resources necessary to construct the building of their dreams. So while noting that the relative wealth of their owners connected many of the American follies to their European counterparts, Lancaster points to something else that, perhaps, better defines what made the American folly tradition unique:

“Though few of these republicans’ follies were as imposing as those of the dignitaries of Eurasia, some were comparable in size, most were imbued with uniqueness and originality, and a good many—intentionally or not—appeal to our sense of humor, calling forth responses ranging upward from an indulgent chuckle.”(43)

This passage underlines the idea that a building could elicit a spontaneous, humorous delight. As a result, this line of thought directly challenges the notion of an interpretation of the American folly as the progeny of the European tradition. Or as Headley, an English folly researcher, comments pointedly, “American follies are nobody’s borrowed ideas. They are originals, even when they mimic Old World models.” (Headley 1996, 2) So while surely a somewhat hyperbolic claim, Headley points to a distinctive development in the folly tradition once the Americans get involved.

Lancaster winds this argument into the fabric of Jeffersonian Democratic architecture by suggesting that George Washington and certainly Thomas Jefferson’s

affection for building was the same sort of delight captured in the original French term, the *folie*, the delight in a place or in the creation of place.

Still, Lancaster's view of the American folly was itself tied closely to the view of the folly as something impractical or fanciful. Thirty-six years later, Headley, an English folly expert, would pen the second primary catalog of American folly.

As the former president of the UK folly preservation group, The Follies Fellowship, Gwyn Headley remains a respected commenter on the folly form. His view of the folly itself, and certainly of the American folly, includes a greater range of structures fitting the definition, and offers a vision of the folly more closely tied to the cultural rhetorics of American freedom and individuality.

His efforts to define the form remain an interesting survey of conflicting statements and intentional generalizations.

“(Follies are) structures that are not ordinary buildings but are edifices that transcend the banal, the commonplace, the simply utilitarian....Not every curious building will qualify, yet gardens can merit being called follies if their architecture surpasses their horticulture. Architectural follies transcend barriers of style, time, taste and nationality. They spring from those most human of emotions: vanity pride, passion, and obsession.” (1)

Later he offers:

“Another attempted definition of folly goes like this: orthodoxy rules that form follows function, therefore, when a building patently fails to adhere to that form or fulfill that function or, even worse, deliberately sets out to pass itself off as something else, then it must be a folly.” (29)

In his playful definition, Headley's echoes the claim that it is easier to define what a folly is not than what it is. Since the folly is excluded from architectural discourse, Headley finds it helpful to define the folly through this exclusion. He even goes so far as to suggest that “you cannot consciously build a folly. You will construct a building for

your own reasons, but only other people may call it a folly.” (1) This creates an impossibility of definition or intent, only allowing for reaction and exclusion.

Headley argues, in essence, that the act of setting a folly outside of the mainstream must be defined as a reaction to the orthodoxy. The true transgressive act cannot self-define, only create a negative space in opposition to the cultural order.

As a result of this exclusion, Headley is forced to discard what he calls “billboard architecture” from his folly category, while simultaneously admitting a self-similarity. Singling out Robert Venturi’s Long Island Duck as an iconic representation of folly-like architecture designed to attract commercial attention, and as a result fulfill a specific architectural program, he determines that it must necessarily not be a folly.

“Follies come from peace and contentment, or passion and commitment. They come from a surplus of money, rather than the need to make money.” (1)

Still, he sees a connection between billboard architecture and the folly, one strong enough to provide a chapter in his book of American follies, in part because they are a “unique American tradition.” While excluding billboard architecture from the folly category, he simultaneously willfully contradicts himself by suggesting otherwise. Of course, this points to a difficulty and hints at a solution. “Strange” buildings share a typology that transcends their intention. What these buildings share is a playful sense of delight in the original sense of the French term. The folly and the Long Island Duck are buildings that share a sense of pleasure, even when their functions vary.

“Follies stem from passion, obsession, and suspicion. They also come from grief and confusion. They can take any form, any style. A folly is a state of mind, not an architectural style. Follies can even have a use or purpose, whether that was in the creator’s mind or not.” (2)

Beyond the Folly

Perhaps driven by the pragmatic British notion of the folly as a sort of non-functional failure, related architectural forms have sought new terms to anchor themselves outside of mainstream architectural practice without suffering the encumbrance of the term folly. As a result, related to the folly we can add “unusual”, “visionary”, “unreal”, “fantasy”, “fantastic”, “narrative”, “weird” and even “bizarre” architecture. Each of these labels has pressed for outsider status while still claiming some sort of function, a fundamental utility. Where the folly suggests a hidden value in its “uselessness”, these related forms of architecture promote some form of orthodox utility. Or as the introduction to a volume dedicated to the concept of “fantastic architecture” opens with the notion that such a thing is really the search for “unofficial architecture.” (Schuyt, Elffers, and Collins 1980, 6)

The terms fantastic, fantasy, visionary, bizarre and unusual architecture, then, have found a usage to describe both follies, folly-like and even non-folly structures. What each of these terms share, in their various nuanced usages, is a genetic relationship to the folly as something outside of the system of architecture. And each term requires some scrutiny to see specifically how it is used and what conceptual space it seeks to carve out between the folly and the accepted notions of architecture.

Headley’s mischievous introduction to the visual collection *Bizarre Buildings* (Cattermole and Westwell 2007) suggests that money and client-driven visions have as much to do with the bizarre in architecture as any flight of the architect’s ego. But ultimately, he suggests that what makes a building bizarre is simply its difference:

“It takes much to surprise us today. Fifty years ago any deviation from a rectilinear norm would have the natives spluttering their beers and concocting improbable stories on the inevitable fate of the occupants.” (6)

But difference is not enough, because it is always set against a historiographic context, a blind nostalgic eye:

“The most vulnerable decade for a building is when it’s 30 to 40 years old. The architecture will be unspeakably ugly, the structure will be impractical and expensive to maintain. It will look shoddy and unloved. The architect himself will be unfashionable and probably harbor inappropriate political views. Any move to tear it down will quickly gain popular support.” (7)

In other words, the bizarre can simply be a widening fissure of fashion—a style out of time. This leads Headley to collude the term bizarre with folly.

“In the past many unnecessarily extravagant buildings were dismissed as follies. But very few buildings are inexplicably mad; in the main a folly is a misunderstood building. The word folly came from foolishness or madness, so the term was applied derogatorily to a building the viewer didn’t understand.” (7)

In this way, Headley attempts to recover the term folly through the exploration of the bizarre. While folly resists the system of architecture, the bizarre can petition for inclusion on the basis of being merely “misunderstood”.

This conceptual about-face from Headley’s views expressed in the “Architectural Follies in America” suggests that the notion of the folly unnecessarily restricts the inclusion of other “odd and peculiar” buildings which share a fundamental similarity to the folly.

In the same book that Headley colludes the bizarre and the folly, Cattermole talks of “outrageous oddities and extravagant exceptions”, and supports the idea that the bizarre can as easily accommodate the professional architect as much as the eccentric amateur. In his view, what makes a building bizarre is its singularity, uncategorizability and willful exception to the accepted rules.

“This is a collection of projects that dared to be different, instead of follow the herd. They are not drawn together by a unified movement, a convenient ‘ism’ with which to be pigeonholed. They are themselves. Put simply, they are ‘bizarre buildings.’” (8)

Cattermole concludes his introduction with an exploration of three categories of bizarre, the Dunmore Pineapple’s (1761) “odd architecture” of time and place, the “eccentric architecture” of Sagrada Familia’s (1882) divine engineering and Frank Gehry’s Guggenheim Museum in Bilbao (1997) as the “extravagant architecture” of instant icon. Placing Dumore’s well known folly alongside equally recognized icons of orthodox architecture points out the core of the folly is shared outside of the folly category. In this case, that core features is simply labeled “bizarre.”

The book “Fantastic Architecture” reflects many of the same themes and ideas. In his introduction to the collection of designs considered fantastic by the book’s editors, George Collins admits that such a thing as the fantastic is not easy to categorize and analyze, suggesting, “Perhaps that is what fantastic means: to be so exciting or strange as to be indescribable.” (Schuyt, Elffers, and Collins 1980, 8)

This ineffable quality of the fantastic appears to reflect the qualities of the sublime. But, interestingly, Collins sees the fantastic as set aside from the fine art traditions, including the avant-garde.

“Nor is that fringe the frontier of art. They are not so much demonstrating in what direction the arts should go as what a lark it is to do as they do—only differently.” (8)

The emphasis on the “difference” in fantastic architecture works to reshape the exclusion of the folly into a meaningful resistance to the orthodox.

As he states, “In other words, most of what we have here is extracurricular, not what is taught in architecture schools, and is only peripherally related to architecture.” (10)

Collins ties these ideas together under the French concept of *architecture douce*, or soft architecture, recognizing a difficulty with this term in English translation. “But for sure it is not soft, and this involves analogy to the French ‘*energie douce*,’ meaning low tech, which is elusive to the English-speaking reader.” (11)

As a result, fantastic, or *architecture douce*, is not equivalent to folk architecture because not all is produced outside of sophisticated architectural practice. Nor does this term equate to vernacular architecture, because many of these fantastic examples are built outside of vernacular norms.

He finally quotes “Architecture d’Aujourd’hui” to better clarify the term *architecture douce* and to explain his substitution of the term with fantasy architecture.

“Soft architecture...refuses to use the processes of production, industrial procedures, and divisions of labor.... That is, soft architecture tries to establish new relationships between producer and user (often the same person). It is involved in new relations between Man and Nature in its respect for ecosystems, and its refusal to squander energy and materials; it pursues autonomy. It proposes itself as a possibility of poetic expression and total realization which permits an individual to recover his integrity by nonspecialized work, rejecting any division between the intellectual and manual.

“In its method of production it must be artisan, and for obvious reasons it is often self-built; it replaces the project about space-making by the process of space-making; it wishes to be antimonumental, not rhetorical, but poetic.” (11)

This turning of the concept of fantasy architecture toward the emancipatory properties of the fantastic utopia further flavors the concept. Much like Vilder’s notion of the folly as a structure representing a sort of psychological freedom, Collins emphasizes a

stronger form of social liberty. Here the utility of the fantastic is made clear. And the folly, as a form of the fantastic, can also be understood as a dangerous transgression of the system of architecture.

By recognizing what this book calls “fantastic architecture” is, by and large, produced outside of the architectural mainstream, Collins also recognizes the connection between fantastic architecture and vernacular architecture. But he is clear to point out that while the range of vernacular architecture, produced by people without architectural training or orientation, is diverse; the notion of fantastic architecture remains something else. The vernacular may not implement the system of architecture. But it does not directly challenge it. Only when it becomes fantastic does it bring into question structural power of orthodox architecture.

But this only defines fantastic architecture in contrast, the fantastic as not vernacular, not architecture, not art. When Collins turns to form a more positive description he starts by discarding dictionary definitions that equate fantastic to the eccentric or extravagant. Instead, he extracts the word “fantasy” from “fantastic”, which he then renders “phantasy” after its Greek origin and original meaning attached to “the mental process of sensuous perception.” (14)

And while he understands a certain visionary quality in this definition, and also accepts the role of this kind of visionary imagination in much of architecture, he finds the most relevance to “fantastic architecture” in a more precise meaning:

“We have, then, works that are not simply extravagant, eccentric, and grotesque, but are physical (not merely mental) representations of a thing not actually present, i.e., built bizarre visions.” (15)\

Here the turn from art and the sublime finds a context. While the source of the sublime is always in the power of nature, the power in the fantastic comes from the doubling of the extremes of human imagination with its material form.

Following this idea, Collins places special emphasis on unusual materials. “Use of strange construction materials is an underlying theme of this book. To many it will indeed be phantastic to realize with what unconventional things structures can be built.” (24)

He fits examples of homes built largely of glass bottles, junk and even paper. The category could easily extend with examples of buildings constructed from jet plane fuselages, undulating concrete forms, plastic bottles and coral. Any material used in such a way as to express its unusual use as a construction component belongs in this group.

“Designers here, however, seem to be interested in their secondhand materials for other than economic reasons, in fact, often simply for their picturesque effects.” (Collins 24)

While he resists more traditional aesthetic interpretations of the fantastic, he ultimately must admit, as a result of the form’s materiality, that it eventually abuts with questions of beauty. Important here is the tension—Collins does not want to reduce fantastic architecture to the more traditional aesthetic categories of the system of architecture, but also recognizes that the fantastic is not immune from a more classical architectural interpretation.

Significantly, Collins eventually connects fantastic architecture to the tradition of *architecture parlante* of the French Romantic Classic architects such as Ledoux, Boullée, Lequeu and Barbier. Of this, in a related article he writes:

“The sense of fantasy is often enhanced by surprising symbolic meanings that are achieved by making the whole form of the building speak: Ledoux’s tubular house for the director of waterworks, Boullée’s celestial sphere as a cenotaph for Newton or Lequeu’s stable in the form of a cow. This desire to reveal the purpose of building mimetically was called *architecture parlante* in the eighteenth century.” (Collins 1968, 311)

Key in this observation is that he sees *architecture parlante* as more than mere symbolic meaning written in architectural form. It must be “surprisingly symbolic”. This places a context around the Romantic classicism of Boullée, Ledoux and Lequeu. For example, when Kate Nesbitt describes the functionalist qualities of *architecture parlante* as a sort of attempt at an architectural language, referring to Vidler’s assessment of the form as a sort of “primitive functionalism,” she naturally concludes, “The predominant issues revolve around communication and function, which also number among the vital aesthetic issues for twentieth-century architecture.”(Nesbitt 1995, 99). This perspective seeks to understand buildings shaped like objects more as a form of billboard architecture, in Headley’s analysis, than architecture designed to clearly and simply state its purpose.

But Collin’s claim is somewhat different, arguing that something fantastic, something surprising, must be at work in this form of architecture. This notion provides a new reading on the idea of *architecture parlante*. Freed from needing to speak a positive language of fact, these buildings actually are allowed to say something surprising, perhaps even ridiculous, but never something nonsensical. Whether Lequeu’s stable shaped like a cow or Ledoux’s brothel in the form of a giant phallus, the architecture

speaks as an exaggerated and unnecessary sign signifying an obvious referent. It is hard to look at these designs and not wonder if you are missing the joke.

From the point of view of fantastic architecture, there is no need to valorize fantastic architecture as beautiful or sublime, as Nesbitt does. Collins' counter point proposes the possibility of an architecture parlante as a form of unrecognized folly architecture in the sense of the delight it engenders. Rather than toeing the phenomenological and aesthetic line which works to bring buildings shaped like things into the conventional system of architectural theory, the context of folly allows for a new vision of fantastically notable structures.

Utopia

Notions of fantastic, fantasy and imaginary architecture have long held a utopian opportunity for theory and practice. Rather than viewing this category of thought as non-architecture—as we have seen through the popular interpretation of folly building—the fantastic retains a progressive notion that the accepted system of architecture can absorb new ideas from the margins. Architecture can learn from art, from transgressive individual practice and from general utopian visions. Whether fantastic, visionary, experimental or directly utopian, this conceptualization of a resistance to the system of architecture seeks to influence that very system which it has repressed, excluded and pushed it outside.

A somewhat Hegelian vision of the fantastic sees the orthodoxy of theory and practice as a thesis, the resistance of the fantastic, unreal and impossible as an antithesis and the resulting product as a necessary synthesis. In “Fantastic Architecture” (Higgins and Vostell 1971), the authors question whether or not architecture fits with the arts,

while still seeking to establish bridgework between environmental design and the concerns of various contemporary art movements. Keying on Fluxus, Happenings and Pop Art, their book attempts to open a new dialog about architecture freed from both its classical and modernist tendencies. Mirroring moves made in contemporary art, they see architecture as having a new possibility. They argue that the cultural system, the system of architecture, from building codes to planning systems, have held architecture in a sort of static field.

“But in no event should they be allowed to continue to dominate the real needs for creating space, which may or may not be functional, but which is at least relevant to the sensory environment in which we live. The economics of building has led to an aridity in our experience which is not consistent with the richness of our time.” (Higgins and Vostell 1971, NP)

In “The Built, the Unbuilt and the Unbuildable”, Robert Harbison takes this argument a step further pointing out, “This book argues that the solidest architectural facts are fictional to a degree.” (7) So he begins his argument looking at architectural meaning outside of function.

“Without stretching the truth very far, I think one can say that gardens, monuments, and ruins, those most imaginary and uncompelled categories of buildings, are machines, too, which perform essential services and are by now irreplaceably part of the equipment of life,” (8)

By pushing away rationalist notions of function from the center of architectural understanding, Harbison is able to demonstrate the need for the apparently non-functional. Along the way, he suggests a place for this kind of architecture as a cultural function in the same sense of fine art. And like the writers on fantastic architecture, he ends his survey with the speculations of Boullée, Lequeu and others, arguing that built and unbuilt structures are not separated by the notion of unbuildable. Social will, historical happenstance and even construction technology might stop a design from

reaching material form. But for Harbison, these three notions—built, unbuilt and unbuildable—float in textual sea of possibility and meaning. Ultimately, he skirts the argument of the fantasists that the imagination resists the rational. Rather, he sees a kind of churning relationship of the rational and the Romantic in architecture and seems to want the opportunity for a more artistic understanding of the environment. In this matter, Harbison moves along a similar utopian trajectory as described by Higgins and Vostell. In this view, the overly rational view of architecture era requires a counter balance in the fantastic.

The editors of “Fantasy Architecture 1500-2036” (Hayward et al. 2004), a publication which accompanied an exhibit of designs at Northern Gallery for Contemporary art in 2004-2005, engaged more directly in the idea of unbuilt architecture as a form of architectural fantasy. Their catalog focuses on fantasy a category of architectural dreams and utopian visions. Most importantly, their category of fantasy architecture is usually unbuilt. By looking at fantasy as a kind of impossible architecture—whether it is structurally implausible or simply culturally unlikely—provides a means for understanding how this kind of building finds itself on the margins of the discipline. Or as they say:

“More so than any other art form, architecture is inextricable from the forces of politics, economics, social change and technological innovation. It feeds off these influences and in turn helps drive them. Any history of fantasy architecture—however brief and circumscribed—will also be a history of the dreams and failures of the civilization from which it emanates.” (Hayward et al. 2004, 7)

In his included essay, “On the Brink of a Tumultuous Abyss: Images of Fantasy and Visionary Architecture”, Neil Bingham attempts to clarify the issue. He notes a terminological slippage that piles together unusual architecture with imaginative, unbuilt

dreams. However, he finds a need to separate the two concepts into their own categorical space.

“Almost all researchers in this field [fantasy architecture] generally agree that the terms ‘fantasy’ and ‘visionary’ are questionable and often indefinable labels that have become attached to designs that fall outside commonplace and work-a-day architecture. There is a debate as to whether it is possible to have built examples of fantasy and visionary architecture.” (12)

So even while accepting, for example, that Mendelsohn’s Einstein Tower (1924) may be a form of built fantasy, he continues:

“Nevertheless, it is generally accepted that fantastic and visionary architecture are at their best when presented as an illustration in any medium that allows the imagination to roam and shows the viewer the unexpected.” (12)

So while accepting paper, scale models and even computer visualizations as authentic, and perhaps appropriate, forms of fantasy architecture, this statement skips the obvious efforts to render fantasy in final built forms—the designs that fall outside of accepted forms of architecture.

Bingham makes his case for the unreal in fantasy architecture when he discusses fanciful sketches created by Edwin Lutyens for his dying friend Barbara Webb. Noting that the illustrations provided a comforting link to an imagined place of dreams, these fantasies allowed the friends to “forget all the harsh realities of the world.” From which he concludes:

“And isn’t that what fantasy should do.” (16)

By linking fantasy to this sort of utopian imagination, he also finds a fantastic impulse in Russian Constructivism, Italian Futurism and German Expressionism. Each of these movements imagined dreamlike antidotes to turn-of-the century cultural upheaval.

In this case, fantasy drove, and was driven by, a utopian urge. The sketches themselves, while of unbuilt structures, were a liberated form of design.

He even finds an anchor in fantasy for rational Modernism, when he says:

“Their methods, often dialectic and empirical, are considered today by many critics as idealistic and utopian. In other words, a form of fantasy.” (16)

Ultimately, while finding a fantasy thread tying together the likes of Goff, Wright and Soleri, he argues for the importance of flights of imagination to the practice of architecture.

“Today, the architectural world of fantasy proliferates, aided by the technological wizardry of the computer. With a strong tradition behind them, the new fantasists, like their historic predecessors, reach beyond everyday building to transfigure, distort, extend and give new meanings to architecture.” (17)

Like the explorations of fantastic architecture, the fantasists postulate a kind of imaginative utopia, a realm free of the structures of the rational world. This point is utopian because, in most cases, the flight into imagination is not typically seen as an end in and of itself, but as something that can stimulate real world change, if not in material structure, then certainly in the meaning we make from our cultural systems including architecture.

In his contribution to “Fantasy Architecture”, “Fighting the Banalities of the Built: Pop Capriccios, Visionary Videos and Beyond,” Rob Wilson echoes many similar themes, but sees the fantasy image in tighter relationship to the built environment. The imaginative design does not just serve a utopian longing; it also creates a space in design in which the viewer can engage in architectural possibility. “Crucially, fantasy architecture must engage the imagination of the viewer with imagery that is not over-

proscriptive, leaving them the space in which to project their own narrative and imagined futures....” (19)

In this way, he connects the notion of architectural fantasy to the painting tradition of the capriccio, the painted fantasy. Also, and notably, this move further retrieves fantasy from the field of folly, making it instrumental to design. If fantasy serves the system of architecture, then it clearly cannot be set outside of that system.

So his concern is neither to separate fantasy entirely from built form, nor to erase the central role of image in fantasy. Looking at the imaginative unbuilt works of Archigram and Constant’s New Babylon, he sees them as prescient to the playful mega structures that would presumably follow in built form. Likewise, while Cedric Price’s Fun Palace was never built, it deeply influenced the design of Richard Rogers and Renzo Piano’s Centre Pompidou (1971-77). Fantasy, in Wilson’s view, becomes a repository for imagination and a constant source of architectural design inspiration, or what he calls “the stand alone power of images”:

“This underlines how the built environment we inhabit is just the residue of a much greater imaginative world that never saw the light of day, evoking what might have been or still could be—the unbuilt, the lost, the ephemeral and the future. We cling to the small visible tip of a gigantic submerged iceberg of fantasy, which itself provides enduring imaginative sustenance against the banalities of the built.” (23)

What Wilson never manages is to successfully remove fantasy architecture from fantasy. In fact, he doesn’t even try. But what should be clear from the analysis so far, is that fantasy is simply a form of folly in the sense that both capture something of delight from the margins of architecture.

What these counter terms to folly ultimately discard is the folly’s freedom from the system of architecture. Happily outside orthodox architecture’s inside, the folly

allows for the moment of liberating play central to a notion of ludic architecture. Fantasy, fantastic, bizarre and visionary architecture only admits to its exteriority in the moment, but seeks a method to sublimate back into the mainstream of architectural thought. Being a freak, this unusual architecture seeks acceptance and relevance outside of itself, within the mainstream notions of architectural beauty, meaning, utility and history. The counter argument here would be that anything for which there is a label is always already incorporated within the system that fabricates it as its other. Folly, then, may well be a term of sublimation and not exclusion. It may well be the uncanny made homely.

While linked to folly as a form of outsider architecture, these related conceptualizations ultimately discard their central delight on the road to seeking admission into more serious architectural concerns.

Likewise in *Fantasy Worlds* (Maizels, Schaewen, and Taschen 2007), the authors seek to encapsulate the unusual in architecture by framing the issue largely in terms of a creative impulse and the expression of creativity through unusual materials. They conceptualize the notion of fantasy as places built with artistic intent by individual creators. These “visionary environments” are linked closely to outsider art or art brut traditions, and typically include found materials, rough craftsmanship and idiosyncratic design.

Framed in this way, their fantasy worlds have a particular orientation in France, and mirror a similar claim by Lancaster about the United States.

“One of the great mysteries of visionary environments is the diversity of their geographical location and their particular prevalence in France and the United States. Is it because of the natural individualistic nature of these two nations, both of whom were born out of revolution and regard for individual liberty?” (14)

This emphasis on individuality and personal freedom leads to another useful observation about the marginalized in architecture—the challenge and difficulty in arguing for its preservation. Expressed as individual notions or visions, the utility of these fantasy structures appears either limited in terms of speaking to broader cultural claims, meaning or, even more problematic, appear as a direct challenge to architectural orthodoxy.

Maizels et al use as an example the Heidelberg Project in Detroit. Here, found materials are appropriated to produce a fantasy landscape in place of blight. However, the city seems determined to remove the ad hoc collages and return the street to a state of urban decay. This example shows how something like found material can be put at play, how urban environment can be put into play and become delightful and how orthodox environmental functions actively work to oppose it.

Theming

Of some relevance to the related notions of fantasy, visionary, fantastic and impossible architecture fall the category of “themed architecture.” Deriving from the same theoretical milieu as architecture parlante, themed architecture displaces image and story in an attempt to create, or perhaps more accurately, fictionally recreate place in a narrative sense.

“Throughout the world the themed space has grown in ubiquity, popularity, and diversity.” states the introduction to the anthology, “Themed Space”. (Lukas 2007, 1) Describing a themed space as an “overarching theme...to create a holistic and integrated spatial organization of a consumer venue” the relevance of “theming” to the general architectural notion of the folly seems at first limited.

However, Lukas argues that the success of commercial theming appears to have influenced more pragmatic design concerns in areas such as home building. Noting that the housing industry has moved from strong type theming, such as Southwestern style to the more mundane manufacture of sprawling suburbs, it now finds itself returning to themes to increase development value. Even at the individual level, home owners have resorted to theming rooms, if not their entire homes, after such narrative themes as Egypt or sports.

“The theming of the home and of intimate spaces that are not used by the public or determined by a corporation suggests a movement of theming into a more personalized realm.” (4)

What once would be folly, a Cape Code clapboard house in the high plains desert of Colorado, becomes a commercial sales pitch, an image meant to help sell a home.

This bridgework suggests a connection between mass commercial interests of theming, probably best represented by the fantasy worlds of the Disney parks, and the tendency of theming to return to the idiosyncratic, personal vision of the visionary and fantastic architecture. However, rather than read heavily themed, intimate home spaces as the intrusion of commercial theming into private life, we can see the opposite force in play. Theming as a component of the folly, the fantastic and the visionary in architecture has precedent over the more contemporary commercial appropriation of the language of theming. In other words, commercial theming can be read as an attempt to capture the freedom, imagination and delight of these transgressive forms of architecture in a safe and marketable, ready for sale package.

Criticism

Architecture outside of architecture, playful fantasy without serious intent and narrative in the service of commerce has their own critics. Ironically, these criticisms help to further clarify the bounds or shape of the folly, in its many guises.

One of the most articulate objections comes from Wall Street Journal critic Ada Louise Huxtable in her book-length analysis of topic, “Unreal America”.

“This is a book about that unreal America and how it is changing what and how we build. The most serious, beautiful, and innovative architecture is increasingly isolated—even rejected—for the environment as entertainment, or nostalgia, or never-never land.” (1)

Her concern is that the architecture of entertainment and leisure has combined with naïve nostalgia to create an architecture of nowhere, an unreal architecture that is distinctly American. As she states, “Real architecture has little place in the unreal America. A public increasingly addicted to fakes and fantasies is unprepared and unwilling to understand the unfamiliar” (3)

Clearly, in another era or context, her “unreal” architecture would fit squarely within the frame of folly.

Her attack on the unreal centers on what she derisively calls the “Theming of America.” And while she sees the motive in this theming as intrinsically economically motivated—developers who cater to the fantasies and desires of the masses, whether in planned communities that hearken back to simpler times or simply pander to illusions of endless leisure and comfort in what she sees as “one of this country’s mammoth real estate investments opportunities”—her deeper concern with the subject relates back to a desire to see “serious” architecture resist the corrosive effects of its more fun fantasy

cousin. The escape from the “disturbing or humdrum aspects of urban or suburban life” remains more appealing than the apparently rational material facts of life and history.

"There is no cynicism in the Disney creation of Main Street, U.S.A., even as Main Streets die across the country; there is simply no connection made between the two. Fantasy and selectively re-created reality have become an undifferentiated whole, in which the change of function to evocative entertainment cancels out the meaning and value of history and form. There is no longer an attachment to actuality. The appropriated is validated over the source." (41)

She continues driving the general argument about how fantasy and imagination overrule the authentic in architecture by suggesting that this is also the source of the utopian ideal.

“The rejection of reality or unwillingness to come to grips with it in favor of something easier and pleasanter, is not a new American phenomenon. There is a legitimate tradition here, of sorts; so much of this country has been created out of wishful thinking and whole cloth. So much has been invented by those who never knew the original or know it only secondhand or had a remarkable instinct for the exploitation and transformation of precedents to serve some new and unrelated purpose or context.” (41)

In short, the American dream, the American utopian urge, is one of fragmented appropriation, confusion of vision with reality and, at times, reality with vision. Her argument vigorously reclaims the utopian aspects of architecture from the outside of the orthodox. But her rejection of the unreal points to its central folly.

However, Huxtable’s tendency to polarize the subject into real and unreal categories undermines her position. She cannot clearly argue why the organic “unreal” deserves a critical attack simply for cleaving from the real. She even notes, as we have seen, that the unreal has a certain attraction and value. And in her view, nothing presents the argument better than the fake of Disneyland. “There is a direct line from the historical invention of place in the American past to that quintessential and most universal of modern American inventions, the theme park.” (44)

In her view Disney is the dynamic source of the unreal in America and the Disney style of fantasy is overly commercial, brutally driven by the facts of the real estate and popular culture markets, naïve design-wise and bereft of wit. As a result, she strips away any possible ambiguity and only sees a commercial enterprise, and that is not fun.

Ironically, she states:

“I define wit and fantasy differently: as a freeing of the mind and spirit to explore unknown places, rather than a handshake from some unconvincingly costumed actors in a totally predictable and humdrum context.” (61)

In this comment, you can hear echoes of the fantasists who see the value of fantasy in staying on paper and the rejection of folly as fantasy in built form.

Huxtable sums her argument by making a reasonable observation—building the unreal as an escape from the real is one thing. But as the unreal becomes shaped by the entertainment industry, do we really want to shape our real places by the methods of commercial entertainment? How can we separate the optimism of the utopian ideal from the dross of commercial fantasy?

“There is an important difference between today’s thriving entrepreneurship of illusion and the impulses that invented identities for raw land and new communities in the past. Those earlier identities were an investment in character for rapidly growing new settlements, an attempt to establish some ready-made sense of place to define and speed development. Today’s themed creations are not, and never will be, real places; they are not meant to be.” (69)

What makes Huxtable’s position here somewhat knotty are several assumptive missteps in her distaste for Disney—both in general and specifically around Disney’s Main Street U.S.A. Second, she proposes that there exist multiple forms of fantasy, a pure flight of imaginative freedom and a co-opted commercial version. And third, she simply echoes many of the claims made about folly without supporting these claims.

In terms of her indictment of Disneyland and its Main Street, Huxtable imagines a brazen businessman in Walt Disney, designing his park with all the capitalist intent of the average strip mall developer.

But in “Designing Disney’s Theme Parks: The Architecture of Reassurance” (Marling 1997) Karal Ann Marling provides an very different history. Rebuffed by his own brother and animation studio, Disney sold a life insurance policy and a vacation home to gather the necessary funds to fuel the early development of the park. Obsessed with making a new kind of family “fun park”, Disney’s focus and lack of central financial incentive puts him in the cohort of the greatest of folly builders. It is difficult to see the Disney theme park enterprise today as anything less than a landmark in entertainment. But in its early years it was one man’s vision driven by an interest in the miniature and in nostalgia for a by-gone era.

Thus, Main Street may appear a kitschy form of cheap nostalgia. But for Disney, banning cars, and sending people strolling down a narrative borrowed from his own memories of growing up in a small town, Marling argues that Main Street was an attempt to resist the growing harshness of the LA sprawl.

“As a maker of mass art, he (Walt Disney) did care about the tastes and preferences of a vast multiregional, multigenerational, and multinational audience. And as an entertainer, a creator of comic characters, a teller of fairy-tale fables meant to resolve the conflicts encountered in the world of toil and trouble, he did not believe for a moment that art—his art, the picture postcard kind—was obliged to be disturbing, challenging, unsettling. He believed instead that it ought to provide comfort and refuge from that world of woes he knew at first hand. His park was built behind a berm to protect it from the evils that daily best humankind on all sides. It aimed to soothe and reassure. It aimed to give pleasure. Joy. A flash of sunny happiness. The small, sweet, ordinary, domestic emotions seldom implicit in the definition of aesthetic pleasure. The architecture of reassurance.” (83)

If Disney's land was truly a folly in the classic definition, and if the goal of the place was to erect a place away from the harshness of reality, then Huxtable's central argument seems in doubt.

However, the second issue, of fantasy wrought instrumental through commercial pressure, may stand regardless of the intentions of the designer. Because whatever Walt Disney wanted his parks to be, Huxtable argues that they have become merely commercial enterprises and that the folly and fantasy have been preserved like a façade over a more deliberate capitalist enterprise. This notion suggests that the folly can return from the margin in form, but function in an orthodox architectural role making money.

But a building masquerading as folly has its own problems. And on this point, though Huxtable's criticism of the fantastic, of the folly built in earnest, feels contemporary, the basic objection as it relates to American architecture is at least as old as AJ Downing's 1850 publication of "The Architecture of Country Houses" where he comments:

"Something too of novelty and strangeness makes mere style in architecture like accent in a foreign language captivating to those whose love of novelty is stronger than their love of what is intrinsically beautiful. So far as an admiration of foreign style in architecture arises from the mere love of novelty it is poor and contemptible so far as it arises from an admiration of truthful beauty of form or expression it is noble and praiseworthy."
(Downing 1969, 27)

A key thought stands out in the quote. First, this objection clearly raises the issue of beauty. To Downing, the issue of novelty was not that it was uninteresting. In fact, his books are filled with a wide variety of house patterns and styles that while they might have been considered appropriate in specific contexts, were veritable catalogs of novelty. Rather, Downing's concern is that the pursuit of novelty in and of itself reduced the concern for beauty. Here, novelty, or the specific outsideness of the architecture,

threatens the notion of beauty. This suggests a criticism of the fantastic, unusual, bizarre and fun architecture in the sense that it threatens the aesthetic grounding of the entire form. Folly, or novelty, threatens the authentic, the beautiful.

Huxtable, following Downing, offers a clear explanation for the marginalization of the folly and its recuperation in other guises such as fantasy and the fantastic. Whatever the delight, or novelty, in the folly, in all its forms, threatens the aesthetic base of architecture. So, while clearly a form of architecture, and often the source of architectural inspiration, the folly remains toxic and must be held at arm's length. What remains is to finally delve into the source of this "delight", to finally excavate fun from the folly concept.

Architects Having Fun

The fun, the frivolous, the fantastic and the folly have, of course, entered into the professional architectural dialog from time to time. And on this note, Cedric Price's Fun Palace and Constant's New Babylon deserve special attention. While neither project was realized, each directly attempted to reconcile the ideas of "fun" or "play" inside serious architectural designs. Price saw the Fun Palace as a constantly evolving modular structure that would reconfigure to meet various needs for art making, learning and congregation of London city dwellers. (Mathews 2005, 2006)

Constant's New Babylon, while more farfetched and speculative, was still described as "ludic", and clearly references fellow Dutch thinker, Johan Huizinga and his book, "Homo Ludens". Nominally a utopia, New Babylon was conceived as a self-contained pedestrian universe where people would roam nomadically, living and playing

in a colossal mega structure set up above the ground and suspended above the oppressive necessities of staying alive. (Wigley, Constant, and Witte de With 1998)

What connects both Price and Constant is how their visions have become a part of the architectural dialog. On face value, Constant's New Babylon appears to be the height of folly and even Price's more sober palace played with imaginative ideas more than it focused on what it would take to put them into practice. In this way, both designers have become a sort of modern membrane between the truly absurd, the folly, and the architecturally possibly, extolled as design imagination rather than pure whimsy.

These unbuilt, non-folly folly proposals help bookend the subject of the folly, a form of architecture that spans the individual and frivolous, the speculative and imaginative, the improbable and the unusual, with a form always at the far edge of what the center of architecture attempts to define. Excluded and tolerated, derided and praised, the folly in all of its different forms appears as one of the most problematic categories in architecture.

The answer for what strings all these marginal forms together and what push this category to the edge, but never outside the orbit of architectural theory, requires a new organizational schema. And as suggested by Price and Constant, that schema is found in the concepts of play and fun.

Homo Ludens—Ludus Loci

In his widely read and deeply influential historiography of play "Homo Ludens", Johan Huizinga (1955) explicates the presence of play as a pre-cultural, culture-making force. If play has been sublimated into culture, then it exists as a subtle thread, readable

and knowable in history and historical events. If play is stitched into the very fabric of culture, then finding that thread requires a careful reading and a vision attuned to its presence. Tennis courts and courts of law share a genetic relationship in play belied by their current cultural practice and difference in social gravity. At times, where the experience of play appears, history may record something else—the picturesque folly, for example.

Vidler's analysis of the unusual in "The Architectural Uncanny : Essays in the Modern Unhomely" (1992a) provides a case example of this alternative interpretation. While Vidler sees a Freudian, or psychological base, for the uncanny in designs such as Piranesi's fantastic visions and Coop Himmelblau's deconstructed architecture, a play theorist might see something fun, silly or a creation meant to fascinate rather than simply to shock or generate intellectual discourse. Following this method of analysis, the folly may reappear as a legitimate counter-history, a record of play in culture, codified as architecture. The uncommon in architecture may be nothing more than theory and form at play or form meant to delight the mind in a way we often describe as "fun".

This simple suggestion deliberately contradicts, more serious historiographic approaches obsessed with narrating either the primary culture-making forces of the hegemonic power or its anti-thesis in counter-history, for example women's history. Play, unbounded by cultural practice (as evidenced by animals at play) does not always serve a culture-making end. Play, as Huzinga points out, does not require culture, but does infect and inhabit it.

We conceive of history as a positive practice requiring continuity strung between discrete historical elements—people, place, things and events. The play concept disrupts this, both living inside history and opposing it—an Egyptian pyramid on the Las Vegas strip or a medieval castle in the wilds of the American West. In the folly, material fact necessarily contradicts its historical presence. Rather than destroy understanding these contradictions create looseness between the concepts, a looseness that allows for play.

The folly in this view is an a-historical practice, though history is often, if not always, evoked. Follies resist continuity, cause or categorization even as they demand some sort of category or explanation. They are best understood as a category of non-category. What links follies together is their effortless, open, interpretive and free expression of ideas. Floating above the historical plane, the folly can cast anchors almost randomly to historical references without further binding to historical fact. In this freedom, the folly resists categorization with as much force as the system of architecture marginalizes it.

Problematically, then, how can we ascribe the idea of folly to a structure? Despite the range of structures labeled folly, what does the label mean? If a folly, as described so far, is a-historical, if placing the fanciful and fun, the unusual and bizarre into a non-category marginalizes it and asks us never to consider it as a part of a tradition, if it proposes a non-design lineage and a non-product of historical moments, then how can we describe it at all?

What can we say of the folly that provides it a clear standing outside the orthodox system of architecture without necessarily dismissing it at the same time?

One solution is to consider the folly in a class that includes fantasy, imaginative, unbuilt, fantastic and narrative architecture. Assuming a general typology of excluded, but not dismissed, suppressed, but not repressed and always amusing buildings, we come to the suggestion of labeling this category “architecture at play”. Described as a collection of unusual structures, set outside or in opposition to the system of architecture, the claim here is that follies are a form of play and, as such, are irreducible outside of this context. The folly is both an expression of play and, to take off Goethe’s dictum that “Architecture is frozen music”, here the argument suggest, “Folly is architecture at play”.

This then asks for a better explanation of the concept of play itself.

Gregory Bateson’s essay “A Theory of Play and Fantasy” introduces the concept of play as something that inherently paradoxical. Or as he sums, “‘This is play’ looks something like this: ‘These actions in which we now engage do not denote what those actions *for which they stand* would denote.’” (Bateson 1972, 180)

Within the first few pages of his landmark work “The Ambiguity of Play” (1997) Brian Sutton-Smith follows Bateson in laying out an argument for why play is ambiguous, and prone to definitions that serve a variety of rhetorical ends

From philosopher Mihail Spariosu Sutton-Smith gathers the notion of play as “amphibolous” or going in two directions at once. From anthropologist Victor Turner the concept that play is “liminal” or in between two different things. Of Bateson he sums “play is a paradox because it both is and is not what it appears to be.” (1) So animals at play bite in a way that it is meant as a bite, but not a harmful bite. Similarly dramaturge Richard Schechner calls play, the bite that is not a bite, a sort of positive as in the sum of two negatives. Sutton-Smith also invokes Kenneth Burke’s notion of the “dramatic

negative”, mirroring the other claims described as a dramatized presentation of stylized and gestural forms of the positive. (2) Each of perspectives suggests that play is, following Bateson, a structure of the form “something that is and is not what it claims, at the same time.”

In his short review of the subject, Sutton-Smith argues that ambiguity inhabits play though these seeming paradoxes. And from there, the analysis sets out to catalog the variety of rhetorics that compete for the concept of play, as result of this ambiguity. If play can be seen as serving many different purposes, then varying perspectives can argue for specific perspectives on the purpose of play.

In play’s ambiguous character, both as an activity and as a concept, Sutton-Smith notes how efforts to control the meaning of play through rhetorical constructions—such as “play as progress” or play as something that helps the person master new skills and “play as identity” —play’s role in cultural identity-making familiar to scholarship of sports and carnival—generate competing notions of and definitions of play. After surveying the various competing rhetorics of play, he proposes a potential meta-rhetoric of play, attempting a synthetic definition that encompasses all forms of play and play-thought:

“[I] have presented here the view that variability is the key to play, and that structurally play is characterized by quirkiness, redundancy, and flexibility.” (229)

Certainly, this approach recognizes the diversity of play forms, play thought and play rhetoric. But, at the same time, it seems to be a weak form of a central organizing principle that brings all play together inside a common frame. Especially considering

that the is/not is notion presented at the beginning of his book provides that common middle.

Returning to the various notions of amphibolous, luminal, a paradox that “both is and is not what it appears to be”, a positive that is a sum of two negatives and a dramatic negative, we can see a definitional anchor for play.

Of course, play as an activity seems to defy this notion of is/not is. How can an action be more than the act? The answer lies in the description, the context or, as Bateson would have it, in the meta-communication of the act. Here we can see the act as something other than what it is.

For example, throwing a ball is an act. Throwing a ball into a toy chest may not be an act of play. Throwing a ball in a game of catch certainly is. Clearly, it is not the act of throwing which determines play, but rather the reason the ball was thrown. Theorizing this outside of the act—the children throw the ball as a means to form a community, or the children throw to practice physical skills—comes after the act itself.

Fortunately, there is a way out this developing problem. People at play describe the act of successful play as “fun.” As a general pleasure, fun presents itself as the moment of is/is not paradox that Bateson describes. Throwing a ball into the toy box may not be fun, if this act is merely in the service of cleaning up the room. Throwing the ball in a game of catch is fun because the action itself is an expression of work—the effort of throwing— but it is also not an expression of work. The act of throwing is “at play” in a sense of looseness. We enjoy this moment of freedom when throwing is both work and not work. Play lives in the context of the pleasure we call fun, and as such, allows us to use this ambiguous term to describe the is/is not nature embodied in all play.

In this way, we are able to operationalize and describe the term fun.

The introduction of the notion of fun next to play also helps resolve other prickly issues of meaning. Is all play fun? Yes, because when the act of play retreats from the is/is not pleasure of fun, then it becomes something else. That something else may be pleasurable, such as someone playing competitive sports or practicing at playing the piano or playing a role at work to get ahead, but the sense of play that Bateson, Sutton-Smith and others have attempted to capture has become something else. Is everything fun, play? Perhaps by stretching the notion of play to include things like, “Taking a nap is fun,” or “I have a fun job.” But more likely, there are moments of the is/is not pleasure that go beyond our sense of play.

Because of this, there is another value in separating play from fun. This division allows us to look at fun as it applies to other subjects, such as place. And following the analysis, it clarifies why the question such as “What makes a place fun?” continues to make sense. Fun is a pleasure that can stem from any instance of an is/is not context. From that point, we can consider the idea that the architectural folly as simply a fun place.

Returning to the question of architecture, can a concept such as fun help organize the non-category of folly? Headley tackles this broader question of definition when he writes:

“Context is not the language of folly. Follies are out of place and out of time, introspective, extroverted, timid, and bold. Each is a one-of-a-kind, individual work or art forming no part of any chronological or stylistic family.

“Yet some order has to be imposed so that they can be presented to you. The follies presented here have moved far beyond the simple incomprehension that, in former times, led us sneeringly to label them follies. We should

respect them, for there is more humanity to be found in folly than in a century of common sense.” (3)

On face value, Headley’s challenge can be answered by the is/is not notion. While it would overstate the facts to suggest that orthodox architecture only deals in the certainties of either “is” or “is not”, in that a building, design or a theory stands for something in particular, it would be fair to suggest that the orthodox system of architecture strives to eliminate ambiguity. This is a house, that is an office building, this is a church, that is a shopping mall. And so, while buildings in practice may inhabit the inevitable ambiguity of the certainty of physical structures in the flowing context of history and culture, the system itself strives for the rational binary of “is” or “is not”.

This point is poetically made in Paul Shephard’s book-length essay, “What is Architecture?” (1994). In attempting to separate the concrete facts of architecture from the ways we talk about architecture, he notes of our narratives:

“They have value. They’re ambiguous. The material facts—the stones, the tresses, the force of gravity—are not like that. They are conclusive. They exist because they exist, not because we subscribe to their meaning.” (10)

From this basis, he eventually concludes that all architecture has one condition, what he describes as “the land”—which he broadly means as the facts of nature and reality and the constraints these place on the architectural machines we create inside of those constraints—and “human desire”, or the “desire to reshape the world to fit humans.” (107-108)

In Shephard’s answer to the question, “What is architecture?” his two-prong answer is grounded in material and then allows for the ways people talk about that material. And for the orthodox system of architecture, from antiquity through modernity, this description seems to work. Architecture has a material certainty which architectural

language has attempted to mirror with equally certain orders, programs, schools and manifestos.

Buildings, and even ideas about buildings, that deny that certainty fall outside of architecture. But the folly, as something excluded, but necessarily included, even if on the margin, does not attempt to deny architecture. In fact, the folly, whether a faux ruin referring to a real architectural past, or a lopsided house that seems to mock the classical organization of angles, need their reference to the system of architecture. And on this point, Headley is wrong. The folly purely a function of context, dependant on what is to create a what is not in reflection.

Building a castle of field stone in Colorado (Bishop's Castle, Rye, Colorado, 1969-) may claim the name folly because it lacks function, a trained architect's hand or even a place in the traditions of the history of architecture. But it also adheres to the same material facts Shepherd describes. A Colorado castle both is a castle, in its material organization and idiomatic expression, and it is not a castle, in the sense that it has no real connection to the history or purpose that connects authentic castles together. In this is/is not ambiguity, a castle out of time and place becomes something fun, and is recognized as a folly.

Following this idea further, we can sketch a variety of primary is/not is typologies that appear to capture the eclectic collection of follies and related structures that scholars such as Headley observe:

Material: Houses built of bottles, paper and coral all appropriate architectural form while denying standard building materials. "Look!" the William F. Peck Bottle House in Tonopah, NV (1902-1980c) seems to declare. "I am a bottle, not a brick/I am a

brick, not a bottle.” Using bottles as bricks may at first surprise us, but once the idea sinks in, the material substitution still manages to charm.

Time and Place: Bishop’s Castle, along with hundreds of other American castles, defies history and geography to create an ambiguous structure that does not belong exactly where it is. And it becomes an emblem of fun in the process.

Form: Deviation from standard form can be seen as progress, as Franky Gehry and Daniel Libeskind designs illustrate. But wild deviation from form that contradicts function finds its way to books on folly. James Lafferty was so serious about his creation of animal-shaped buildings that he obtained a patent on the concept. But Lucy the Elephant (Margate, New Jersey 1881) stands today as an amusing tourist attraction. This kitsch sculpture that is a building and is not a building, a sculpture that is not a sculpture works as a fun place and fun architecture. The same could be said for Headley’s “billboard architecture.” Sometimes a duck is a billboard. And sometimes a duck is a duck that is not a duck at all.

Function: At times, turning the modernist dictum and Louis Sullivan law that “form ever follows function” upside down is enough to earn a building the title of folly and conjure up fun. Restaurants themed after prisons and insane asylums (Alcatraz ER, Tokyo) take the horrific and make it accessible through the is/not is ambiguity. Or, consider the Winchester Mystery House (San Jose, CA 1884). The rambling 160 room mansion was built by the heiress to the Winchester Rifle Company fortune, and was supposedly built during 38 years of constant construction. Stories told on contemporary tours hold that Winchester hoped to avoid both ghosts and fate through the endless

building. And while this story sits at the center of this tourist trap, it is the apparent functional incoherence that attracts visitors to this day.

Narrative: The question of story in architecture follows many intertwined and divergent themes. And while any narrative can enliven historical context, economic meaning or cultural relevance, certain architectural narratives are crafted to accentuate the is/not is ambiguity. Mickey's House, the nominal home for Disney's trademarked mascot, appeared in Disneyland in 1993 (with earlier versions dating back to 1988 in Disney World's Magic Kingdom). Since this is clearly not a house, but instead a theme park attraction, what appeals to visitors is the heavily themed story represented in built form: This is the home of Mickey Mouse. And in addition to glimpsing his very normal domestic setting, you can also see his barn, where we infer Mickey makes his cartoons. The story, in this case, covers for the obvious fact that this is a wood and fiberglass set, and not a house, that is still a house for a very famous mouse.

These examples might simply suggest a form of incoherence-things that don't fit together being shoved into a clumsy context. But the fun notion of is/is not suggests something else. Rather than two random things forced into mind to struggle for meaning, the fun concepts suggests two concepts that do not reduce, but inform each other. In the case of Mickey's House, this is a house that is not a house for a mouse that is not a mouse. The person who finds this place fun maintains the is and the is not like two walls supporting a space between. The interior of this ambiguity is the home of the pleasure of fun.

Further, not only does the notion of fun work well as an organizing principle, it also removes intent or function from the definition when applied to architecture. A folly

can serve a purpose and folly can appear to others, despite the earnest intentions of the builder. Follies can be designed and built on purpose, and follies can appear after the fact. Follies can serve practical functions and be as impractically unfunctional as the earliest versions of the form were.

Without removing the marginal and ambiguous nature of the folly, fun provides a means to collect and understand the form.

The Language of Fun

If fun is the category that organizes folly, and folly in all its related forms—the fantastic, the frivolous, the bizarre, the eccentric and more—then how can we talk about fun? While the mind may easily recognize fun when it happens, how can we talk about it later? How can we learn to design for fun?

Fun as an organizational theme resolves the variability in what we think of as folly. But it lacks a descriptive capability.

Clearly, game designers and theme park builders have an ability to design fun experiences. So, the question here is less one of “Is it possible to design for fun?” and more “How can we talk about fun on the road to designing for it?”

The next chapter detects a language of fun embedded in videogames, and argues why games, more than any other subject, may be the best place to mine for a general language of fun for use in talking about fun places.

III. DESCRIBING FUN

Toward an Architectural Vocabulary of Fun

“Any game represents a tradition of knowledge. It contains assertions and ideas about aspects of the world.” – Jan H.G. Klabbers¹

Introduction and Context

If follies represent a gap in architectural theory, they also point to a parallel gap in architectural language. The lack of a more precise or meaningful categorization of the folly connects to the general lack of a critical or descriptive language to describe the odd, unusual, bizarre or fantastic in architecture. As a natural consequence, the unusual in architecture is suppressed as much through a lack of language as another other reason. We cannot easily talk about the folly because we lack the critical terms necessary to adequately do so.

When considered as a category of “fun architecture” rather than simply as unusual or misplaced architecture, the architectural folly and related misfit buildings can then demand a descriptive vocabulary, a vocabulary of fun. Without specialized terms and concepts applicable to this category of architecture, it remains difficult, if not impossible, to answer remaining questions about the form, a form of architecture simultaneously ubiquitous and theoretically invisible.

Quoins, capitals and column orders, volume, mass and void provide a canon of orthodox terms and concepts used to systematize, describe and debate architecture and create a method for exclusion of the “non-architectural”. But taken together, the

¹ Klabbers, J. H. G. (2003). The gaming landscape: a taxonomy for classifying games and simulations. Level Up Conference Proceedings: Proceedings of the 2003 Digital Games Research Association Conference. Utrecht, University of Utrecht: 54-67.

vocabulary of architectural dialog lacks any sort of descriptive capability to dissect and scrutinize other conceptualizations of environmental design and building. In the case of the present research, the current architectural system of language on its own cannot answer the question: What makes a place fun?

This chapter attempts to frame an answer by looking at the critical language of videogames, and suggests:

- Videogames comprise a system of knowledge
- This system of knowledge is relevant to architecture
- While not formally developed, the descriptive language of videogames can be considered a “language of fun”

These topics are approached through a review of significant literature related to games as a system of knowledge, game taxonomies, critical terms, and descriptive categories.

Games and Ontology/Games and Meaning

Why use games as a lens for understanding playful space or fun places?

As a first step, Anthony Vidler suggests extra-architectural modes of understanding as a means to open up possibilities around architectural knowledge and theory.

“(D)ifferent materials, spatial or temporal locations, and scales of analysis, including the incorporation of much that has been previously been seen as marginal, incidental, external, and unimportant to architectural history, have served as armatures to destabilizing often tightly held preconceptions of history.” (Vidler 1992b, 133)

While he briefly touches up on the notions of psychoanalysis, gender studies and post-colonial theory as methods for discussing architectural history, theory and criticism, the same rationale suggests an opportunity for almost any framework that promises to enrich the inquiry into human environment by linking to answers outside of the discipline.

On face value, game studies holds promise as such a method. Understanding games as a ubiquitous cultural product provides a context for further inquiry in areas outside of games. Within the context of the current research, games themselves frame a method for exploring the notion of fun.

To expand this possibility, we first must look at the notion of games as more than mere entertainment or leisure, but instead as a system of knowledge and a method of understanding the world.

During a keynote address delivered during the 2009 Digital Game Research Association conference, Ian Bogost discoursed on the notion of “flat ontology.” Referencing Levi Bryant's use of the term, coined by Manuel de Landa, Bogost offered flat ontology as something of a solution to the ongoing methodological battles that have waged in the area of game studies. These disciplinary turfs wars have resulted in part from the wide interdisciplinary nature of the field of game studies. So, in short, Bogost argued that by flattening the ontological relationships between the objects studied, and as a result equalizing the methods of study, game studies could move beyond the seemingly endless squabbles over approach, philosophical orientation and disciplinary posturing that tend to characterize the field. He looked to navigate between a reductionist tendency in formal approaches to games, which sees games only as a specific set of features set

outside their use, and what he called correlationist approaches which only see games in the interaction between the player and the game.

“Such a perspective invites a surprising truth: game studies means not just studies about games-for-players, or as rules-for-games, but also as computers-for-rules, or as operational logics-for-computers, or as silicon wafer-for-cartridge casing, or as register-for-instruction, or as radio-frequencies-for-electron gun.” (Bogost 2009)

Bogost’s goal was not to suggest that any perspective will do, but rather to argue that games situate inside a messy philosophical milieu that is not served by any single method or interpretation. In this manner, a looser set of ontological relationships between the entities, or units, of the game and the game experience allow games to support a wider variety of meanings. In a simple sense, he wanted to pre-empt arguments assuming some *a priori* hierarchy of relationships, and allow any reasonable connection between parts, or objects, at any level, to assert a claim on truth. Bogost didn’t want to limit dialog about games, he wanted to throw open the doors of debate. Meaning about games could come from any direction and meaning from games could come from any place.

His application of flat ontology to the subject of game studies also provides insight onto the relationship of the nominal metaphysical connection between real life and games—whether fully formed virtual worlds or other playful activities contained in the framework of a game. While the conventional ontological position holds that games contain meaning to the extent that they are about something in the real world, a flattening of that relationship removes the assumptive privilege from the “real” and suggests that the real world can have meaning in terms of what happens in a game. This is to say:

Games as a system of meaning can provide a means of understanding of the real world as much as the real world speaks to the meaning contained in games.

The idea that games can do more than reflect reality and can carry meaning about the world remains linked to the very notion of gameness. For example, one of the earliest recorded games, Senet, was played by royalty and the commoner alike, and was linked to ritualistic funerary notions. (Craig 2002, 35) Likewise Go, a game which originated in China over 4,000 years ago offers a link between games and more practical concerns. Legend holds that the game was created to help educate an emperor's dim-witted son. (72) In "Sports and Games of Medieval Cultures", Sally Wilkins describes the scandal surrounding the German game Karnöffel, an early trick-taking card game. "In 1496 a local bishop condemned the 'new' game for turning the natural social order upside down...." (2002, 109) The modern war board game has its roots in the nineteenth century Prussian "kriegsspiele" or war game used to train military officers. (Perla 1990, 25) In 1904 Lizzie J. Magie patented The Landlord's Game, hoping to use it "as a moral tale showing how unfair rents could be charged by unscrupulous landlords...." (Parlett 1999, 351-353) The Landlord's Game eventually reached mass popularity (though its social message all but disappeared) in a revised form as Monopoly. In the modern era, games continued to be used as a method for understanding things outside of games. The Situationists crafted actions that were game-based and sought to comprehend society as a form of game, as clearly illustrated by Situationist leader Guy Debord in his A Game of War (Becker-Ho and Debord 2007).

In the past 10 years, the Serious Games movement has generated attention and credibility based on the idea that games can carry meaning about the world, and that by

playing games the game player learns about the world. Or as James Paul Gee pithily noted in his key text “What Video Games Have to Teach us About Literacy and Learning”, “Real life works something like a massively multiplayer game—a game like *World of WarCraft*.” (Gee 2007, 7) While Gee’s interest is in discovering the learning principles embedded in good games, he must first commit to a solid connection between the reality of what goes on inside a game and the reality we experience outside the game. In other words, the rationale for why games are useful in teaching depends on their ontological standing in terms of the real world. We can teach using games because games are, in some sense, about the real world. During play, games contribute to a specific understanding of the world.

Despite this obvious bridge of meaning between games and the real world, game play is often seen as something outside of daily life and, as a result, unproductive. Johan Huizinga notes that “Play is distinct from ‘ordinary’ life” (1955, 9) drawing a conceptual line that circumscribes play and makes it possible only by separating games and play from real life. This suggests that games and ordinary life are two opposed things. As he further clarifies, “Inside the play-ground an absolute and peculiar order reigns.” (1955, 11). Huizinga’s notion that play happens inside a special space has been expanded and canonized as an aspect of play.

Sociologist Roger Caillois expands and amplifies Huizinga’s perspective by arguing that play is both “separate” and “unproductive” (2001, 43). Game designers and theorists Katie Salen and Eric Zimmerman take Huizinga’s notion of separation even further elaborating the idea of the magic circle, a wondrous stage where games take

place, as central to the design of games themselves—“...a special place in time and space created by a game.” (Salen and Zimmerman 2003, 95)

However, though Huizinga is credited with introducing the concept of the magic circle as something set aside from ordinary life, he still recognized how play tended to escape this boundary. For example, play communities, people that organize into groups based on experiences that occur inside the game, tend to persist outside of the game, outside of the magic circle. “A play-community generally tends to become permanent even after a game is over.” (Huizinga 1955, 12) This line of thought is developed in greater detail by Celia Pearce in her study of virtual worlds, “Communities of Play”. (2009) This examination of groups that play across multiple virtual worlds and the real world led her to argue that, at best, the magic circle is porous and that play easily moves through nested contexts. In her study, she describes how players in one game, or virtual world, shifted their community to a new virtual world platform, almost intact. Further, she looked at how these virtual communities were able to translate into real world relationships, outside of the computer-mediated worlds where the bonds were initially formed. She ultimately settles on the idea of a “ludosphere” to describe the interlocking magic circles that allow communities of players to easily move between real world activities and various game worlds.

Alexander Galloway tightens the relationship of games to reality while exploring their social utility. His concern with realism in gaming relates to a critical concern in how games can affect the social structure.

“(I) suggest there must be some kind of congruence, some type of *fidelity of context* that translates itself from the social reality of the gamer, through one’s thumbs, into the game environment and back again. This is what I call

the ‘congruence requirement,’ and it is necessary for achieving realism in gaming.” (Galloway 2006, 78)

While he separates the idea of “realisticiness” or the “mimetic reconstruction of real life” from “realism” or how well a game reflects the social realities of the player, his notion of congruence suggests that the link between the real and the game must be significant if the game is to function. In this way, Galloway proposes an interpretation that mirrors Bogost’s flat ontology whereby neither the real thing nor its reflection in the game is privileged. Both operate in a relationship with one another.

In his book “A Theory of Fun” (2005) Raph Koster suggests that the future of games depends on the tightening of the epistemological links between the real world and games, essentially flattening their ontological relationship. “There is a crucial difference between games portraying the human condition and the human condition merely existing within games,” (174) he explains. While he sees the human condition expressed in all games, his concern as a game designer is to do a better job of making games express things uniquely human. Thus, from the designer’s perspective, he concludes that, “Games thus far have not really worked to extend our understanding of ourselves.” (174) This view might be read as a criticism of any sort of meaningful link between the real world and games. However, Koster’s concern is something else. His claim grants that games must be *about* the world. But as a designer, he is more concerned with the designer’s challenge of how he can best represent the world in games. In this light, Koster does not challenge an epistemological linkage between the real world and games, but rather focuses on an ethical argument of what game designers should express through that linkage.

Viewed back through Bogost's call for a flat ontology, we can see a critical implication common in all of these views: Games can speak about the world and the world can speak about games. Taking a field, such as architecture and using it as a method for exploring games (Walz; Nitsche 2008) also allows for the converse—using games as a method for understanding architecture.

In the scope of the current research, the flattening of ontological relationships between the world and games allows for a method for understanding architectural space as a game. Or perhaps more precisely, by looking at the critical vocabulary of games as a language of fun, we can apply this language of fun to real world architectural space. With the ontological relationships un-stacked, language should speak equally well in describing the fun of a game as well as the fun of a space.

What makes a place fun? Games may hold an answer.

The Model as Machine

The idea of a relationship between reality and some representation of it is far from revolutionary in the field of architectural theory. While the specific application of games to architecture maintains a certain novelty, the notion that architectural meaning can emerge from external representations is as old as architecture itself.

Seen from outside the discipline, the architectural model might appear to combine some useful design purpose, but one wrapped up in the desire to create toy-like structures simply for the joy in the miniature. Non-professionals, for example, routinely enjoy inspecting architectural models of the buildings they are standing inside of. The architectural model is charming.

Inside the architectural disciplines, however, the scale model represents what Albert C. Smith calls “mechanisms used for thinking about and defining future buildings and cultural issues.” (2004, Preface). In his book, “Architectural Model as Machine: A New View of Models from Antiquity to the Present Day” Smith explains how the scale model functions as a machine for generating knowledge. So, rather than simply seeing the model as a representation of a thing, it instead becomes a method of inquiry capable of generating new knowledge, and defining future inquiry.

To reach this conclusion, Smith first helpfully separates the architectural scale model from other forms of model. He defines four non-architectural categories of the model: “(1) mathematical, (2) analog, (3) qualitative, and (4) engineering” (xviii)

He defines the mathematical model as “generally concerned with natural systems and formal mathematical representation.” (xviii). Thus, the mathematical model seeks to correlate the systematic properties of formal systems to observed natural systems.

Analog models are “used to demonstrate known quantitative relations among governing parameters. Analog models generally employ already established functional relationships and are not used to discover unknown relationships.” (xix) . Miniature models of airplanes in wind tunnels and ship hulls in laboratory tanks provide examples of this type of model and, mirroring the formal aspects of the mathematical model, Smith observes that much of analog modeling is now done in the computer.

Smith separates qualitative models from their more quantitative cousins listing “(m)ock-ups, prototypes and test beds,” as defining the domain of the qualitative model. He also points out that architects do rely at times on this type of model, such as cardboard structures used to observe the structures under stress, or skyscraper models in wind

tunnels used to observe vortex patterns. Of these more qualitative assessments he states they are used “in order to study essential attributes of a specific object.” (7).

In his review of engineering models, he does not clearly separate them from mathematical or analog models, and his description sounds close to the notion of a simulation, when he writes:

“Engineering scale models are another category of model, described by Schuring as, ‘... experimental models structured to mirror the true physical behavior of an original phenomenon, or a prototype.’ Schuring further describes these scale models as valid substitutes for systems that cannot be understood at the prototype level.” (xx)

While mathematical, analog, qualitative or engineering models share a classic ontological relationship to the real—namely that empirical knowledge is reflected in the model only to the extent that the model accurately represents reality, Smith introduces an additional type, the conceptual model. This type of model flows from a flattened ontological relationship with reality.

“The subjective model is one that is derived from the mind and not from external objective sources.” (xx)

Important here is the notion that conceptual models are not mathematical, analog, qualitative or engineering models. That is, the conceptual model is not about representing known systems, but about creating knowledge. This suggests that the model itself can generate knowledge, independent of its specific relationship to real objects.

To elaborate his claim into the realm of architecture, Smith divides conceptual models into two types—the architectural scale model and the reference model. Where the reference model “refers to the established rules against which to measure,” the scale

model “is one of the mechanisms humans create to measure and test their various concepts of the invisible.” (xxi)

The reference model, then, provides a context for discussion. The classic architectural orders, for example, provide a reference standard for architects, and in turn, this reference model offers an anchor in something fundamental—whether that was God, nature or some mathematical elegance. The scale model, on the other hand, is a method of inquiry, an attempt to define the invisible and to not only predict the future, but to define it.

Further, these two concepts work together to reinforce an interpretation of the real:

“To be useful for architects, the free associations reflected from the scale model machine need to be controlled. This control comes from the relationship architects have with their reference standard. If the reference standard is too loosely controlled, the message received from the scale model machine will appear uncanny or overly spontaneous. Conversely, if the reference standard is too tightly controlled then the message reflected from the scale model machine will appear lifeless.” (xxii)

Critically, the scale model attempts to redefine the reference model or, in the context of this discussion, the scale model works to define a standard by which we judge reality.

“(A)rchitectural scale models have been employed as thinking mechanisms, used not only for designing future buildings, but also as templates for understanding and testing concepts of invisible things in general. In other words, scale models have been conduits used to define what was considered the absolute truth or, typically, the work of the divine.”(3)

The scale model has been used for centuries as both a method of representing design and as a system capable of generating knowledge. This is the epistemological bridge that links models with reality. The same argument reflects the idea that games form a “model” and to their ability to reflect and define our reality.

Smith brings his theory most closely into alignment with the notion of games when he discusses the idea of the scale model as machine, and the theory of the machine as a system for generating and defining knowledge.

“It [*his theory*] will note the view that machines are an interaction of parts, with other parts, within a whole (or system) unintentionally producing purposive activity and/or function. It will also point to the theory that all phenomena can be explained in terms of the principles by which machines (mechanical systems) are explained, without recourse to intelligence as an operating cause or principle.... It should be noted that, historically, machines were often regarded as toys or agents of magic, marvel and fantasy; for philosophers, they have served as symbols and metaphors.” (64)

The fact that he relates these kinds of machines to toys and to fantasy provides a way of understanding videogames—as scale model machines, magical toys, built to help us understand the world. In fact, he separates scale model machines from other types of machines because the scale model has the ability to take on a life of its own.

He concludes:

“Sitting between lifelessness and the uncanny, the model offers a measurable scale within which to develop *narratives, myths, and buildings* (italics not in the original).”(xvi)

The architectural model as machine matches with the notion of the videogame as a machine or model. In either case, the thing that is not the thing acts in an articulated epistemological relationship to the thing it is not. The model reflects reality and reality reflects the model. This is different from mere representation, though. Here the machine is in action—defined in this case as parts moving together to produce some effect and having the ability to create meaning—rather than something that can simply embody or encompass or encode some static idea or ideal.

Smith traces the origin of the word “model” from Middle French back through Latin, finding the definition morphing from the original word, which meant to measure, through the idea of a mold, into its current form into a sort of substitute or stand-in for the real. This measuring and molding or defining capacity, however, remains a key to his notion of a model.

“Architectural scale models operate in all of these areas, not only defining a future building but also partakes in the definition of a culture’s cosmos.” (62)

This furthers his notion of the architectural model more as a philosophical means of inquiry than simply as a design tool, used to communicate some sort of design intention. This argument also tightens the notion that models act in a capacity that is more than a simplified, tiny version of reality—a conclusion easily reached with the simulation or engineering model. Rather, the architectural model is both a method of understanding (the scale model) and a method of definition (the reference model). In either case, the relationship between reality and the model is reciprocal. Or, in terms of the ontological arguments presented by both models, the relationships between the model and reality are flat. There is not an implied or necessary hierarchy placing the real over the model.

Further, this relationship between definition and understanding interact, informing and supplementing one another.

“ It is through humanity’s attempts at measuring invisible things that humans produce not only units of measure such as inches, liters and pounds, but also the philosophies and belief systems needed to measure and define the interpretations of the scale model. The scale model offers humans an understandable surface (framework) upon which they can project and develop their measures of invisible things. What individuals see reflected in their measurements is affected by the current concept (reference standard) of what is invisible.”(63)

At this point it might be helpful to consider a specific videogame that provides a direct illustration of Smith's concept. Designer Will Wright's *The Sims* remains one of the best-selling videogame franchises of all time. It has often been often described as a "dollhouse simulator." Players control one or more simulated humans, Sims, and make seemingly endless choices about their lives, including what to wear, where to work and the overall design of the places they live and play. And while some critics, such as Jesper Juul (2005, 28) classify *The Sims* as a corner case when regarded as a game, the open-ended nature of the game does invite the player to create their own *narratives*, background stories or *myths* and *buildings*, just as Smith suggests the architectural scale model does.

Not surprisingly, Smith reaches a similar conclusion.

"This study proposes that scale model machines are similar to playing pieces of an intricate game. The purpose of this game is to discover the truth. Scale model machines are used to see whether the current rules of the game are well defined. However, occasionally a rule might be found lacking and will be changed through the mutual consent of the players." (84)

When this conception of the architectural scale model is coupled with the notion of games as systems of meaning relevant to the physical environment, a new method of knowing places appears possible. Games, rather than simply mirroring the known, become systems for generating meaning. As such, looking at the field of games as an evolving test tube for meaning making, testing meaning and understanding, we can now turn our attention to the next task: How can we extract or access this system of meaning to talk about real world places?

Even more so, considering games as models of and for reality, but one focused on play and therefore on the category of fun, how can we connect the fun of games to the

fun of place? In short, where in games can we locate a general vocabulary of fun we can use to talk about what makes real places fun?

Game Vocabularies

To suggest that games contain a language of fun is to argue that games have some sort of genetic structure, and that this structure can be known through a descriptive or critical set of terms. This recognition stems from both a desire to better understand how games operate and, closely related, how to design them.

As game scholar, designer and author Greg Costikyan noted in his formative essay on the subject, “I Have No Words & I Must Design: Toward a Critical Vocabulary for Games”:

“To understand games, to talk about them intelligently, and to design better ones, we need to understand what a game is, and to break ‘gameplay’ down into identifiable chunks. We need, in short, a critical vocabulary for games.”
(Costikyan 2002, 10)

Costikyan’s focus on game play suggests several promising lines of inquiry. First, game play represents a game in action, during the moment of encounter and interaction between the player and the game. As such, this points to the need for a critical vocabulary that describes games as experienced artifacts, machines in use. A structural autopsy of a game’s material form will not capture the sense of fun it was designed to produce. Second, Costikyan’s claim echoes the notion that games are knowable, and that some form of vocabulary is an appropriate tool of inquiry. Third, he points back to a more structural claim that such a vocabulary will relate to specific elements in games and game play, and not dissolve into a contextual debate lacking nominal anchors.

Considering games as artifacts designed to be and enjoyed because they are “fun”, Costikyan’s call for a “critical vocabulary for games” is likewise, as Thomas has argued in relationship to game criticism, a call “to consider the language of game criticism the language of fun.” (Thomas et al. 2009, 5)

However, the evolution of game design as a discipline, and the relatively new development of “game studies” as a field that looks more widely at games as a form of cultural production and consumption, has left many concluding that such a vocabulary for games is lacking.

Mathew Sakey noted “the inadequate critical and theoretical scholarly language for the creative aspects of game development” in his essay “There Are No Words (Yet): The Desperately Incomplete Language of Gaming” (Sakey 2002). His ideas emphasize a long-standing understanding of the need for a gaming vocabulary and also presage a growing interest in the critical and descriptive terms needed to talk about games, game development and, necessarily, of fun.

Almost ten years after Sakey and Costikyan called for better vocabularies, the evolution of professional game development and of the academic field of game studies have taken major steps toward creating better, more precise, accurate and useful methods for talking about games. In fact, at this point, the world of videogames is filled with any number of attempts to break down, reduce, sort, organize and create networks of meaning to bring the messy world of games into some sort of a knowable structure. As a result, these efforts at organizing games under comprehensive descriptive systems both recognize structural similarities across different games, and over time, have enforced these categories through the convenience of their use.

Following the notion derived from Costikyan that a critical game vocabulary should emerge from a) games in action, b) that games are knowable through descriptive language and c) that this language is anchored in structural or observable qualities in games, we now have a basis for exploring and organizing various systematic approaches to understanding games.

First, though, there remains an issue of how the conversation around games defines the possible space of what games can mean, and how the possibility space of games defines the conversation.

The emergence of game genres illustrates the process by which terminology grows out of practice and eventually becomes a conceptual category that appears to define game structure after the fact. So, for example, in the commercial videogame market, it is common to think of major game genre types such as “first person shooter,” “simulation,” “role playing” “racing”, “sports”, “platformer” and so on. Despite the somewhat flexible nature of these categories, they have become a routine method for sorting and organizing game development, game marketing and fan alliance. Developers talk of a specialty in “role playing games”, stores routinely ask customers, “Do you like shooter games?” and players themselves often segment according to genre preference. Wolff, notes this fact in his early effort to outline game genres, where he allows that genre terms are “established and in use by players.” (2001, 116). The “Videogame Style Guide and Reference Manual” (Thomas, Orland, and Steinberg 2007) is more direct in rationalizing its appendix of game genre. While warning that “(g)enres are constantly being created and becoming defunct, evolving and intersecting into totally new

categories,” (73) the guide ultimately settles on defining a set of genres based on the principle of those “commonly appearing in videogame discourse” (74).

Discourse about games has the ability to define game structure as much as game structure defines the discourse.

In this sense, any conversation about games may create a certain structural point of view on games by arguing similarities and differences in a range of games. In the case of genre, discourse about genre defines the genres into which games are classed. Every game has structural features that we can observe which allow for it to be fit into a specific genre class. The discourse, as much as the game itself, drives this classification.

So while specific game genres form a helpful method for talking about what groups a class of games together, the notion of genre independent of any specific list of genres is more valuable as a critical term in talking about how we experience games. Genre as a concept points to the experience of the game through an organizational scheme of a specific genre class. Different genre systems may come and go, and continue to evolve. But all games work inside some system of genre. We always experience genre when we play a game. This fits with the current survey of game taxonomies as concerned with the idea of categories of game experience, anchored to specific structural aspects of games.

Thought about another way, looking at specific genre terms as a part of a critical vocabulary shows limited value in discovering critical terms and useful critical concepts. The genre “first person shooter” is less important to understanding games than seeing that players experience their games inside a system of genre. Genre terms work, in practice, because they present a collection of common game elements that define the genre, and

then this system becomes a primary method for looking at game structure. Genre works as a critical term because it describes the sum experience of encountering specific genre classes.

In order to identify a vocabulary of fun this study will survey the major efforts to systematically describe games in a taxonomic form or otherwise seek to systematically describe games as a concept rather than as individual games. This is identical to the difference between looking at terms that describe the experience of playing games in general and the broad range of descriptive terms used in gaming contexts to describe individual games. So, concluding the example of genre, this review is focused on ideas such as “genre”, and sets aside descriptive terms such as like “first person shooter”.

Not only does this appear to suit Costikyan’s implied criteria for a critical game vocabulary, it also provides a framework for selecting and evaluating proposed descriptive, taxonomic and critical approaches to classifying and understanding games. Following this thread, a number of publications within the videogame studies area deserve note. Each attempts to systematically either: a) comprehensively describe the general notion of games or video games using a focused set of terms or b) proposes a specific vocabulary for talking about or otherwise contextualizing games for further critical discussion.

The following review of gaming descriptive systems, taxonomies and critical vocabularies meet these criteria.

Game Vocabulary Review

Each of the following perspectives proposes a set of terms that aim to systematically describe the category of games, or at least videogames. And while each is

more or less successful in this goal, looking at each in turn and summarizing them all together, provides the best perspective on the state of descriptive game vocabularies, or terms that can explain games in enough detail to act as a language of gaming fun.

An early effort in the literature, Klabbers (2003) finds only three categories necessary to encapsulate the notion of games. **Actors**, **rules** and **resources** provide the framework for describing games and for separating games from simulations. This distinction is important (reflecting Smith's interest in separating scientific and mathematical models from the reference model in architecture) in order to clearly delineate games. In this gross classification, actors are players, rules define the game and resources as the elements in the game.

This effort at separation further recognizes game's role as a system of knowledge, as Klabbers describes them as "existing or imagined social systems". He strives to understand games as tools for learning. As he states, "Gaming crosses existing knowledge domains. It is a trans-disciplinary field of research, education and training, and links many areas of enquiry and professional practice." (55) In other words, refining the vocabulary of games, and improving their taxonomic clarity, provides a better basis for using games as a tool to understand the world itself.

But despite this promising context, Klabbers does not offer much in the way to further clarify the issue. Instead, he elaborates on the actor-rule-resource model by summarizing Marshev and Popov's semiotic theory of gaming:

"syntax of a game - arrangement of elements and rules of a game;
semantics of a game - interpretation and meaning of elements of a game;
pragmatics of a game - design and use of a game." (62)

By combining these two systems—actor-rule-resource with syntax-semantic-pragmatics he produces a three by three matrix, where actors, rules and resources each have a syntactical, semantic and pragmatic dimension. And while this approach does help to structure a typology of games, it does not adequately develop a language useful for either design or more contextual analysis of the experience of playing games—game criticism. Speaking about, for example, the “syntactic aspects of game actors” opens up a discussion, but does not provide a basis for meaningful dialog on its own. The deficit in this model is simply one of reference to the structural elements of games—a key component in Costikyan’s call for a critical vocabulary. Where, for example, is the observable element of a game in play that is the anchor for syntactic actors?

Or consider the problematic place of story inside of games. While Klabber’s model can situate narrative inside its theoretical frame, it does not provide any specific tools for talking about story in game. In this sense, Klabber’s taxonomy is successful as such; it is a useful analytic tool. But it does not offer a complete critical vocabulary of games.

In a similar approach, Konzack (2002) expands from three to seven fundamental categories. Much like Klabbers, he sees these layers as principal aspects in a game, and suggests that his collection of descriptive terms provides a basic vocabulary for talking about all games. However, his categories relate specifically to videogames and include:

- **Hardware:** The underlying physical implementation of the gaming system. The “wires, signals, hardware and components”.
- **Program code:** The software that comprises the game program.

- **Functionality:** This is the first level of useful visibility, where we can observe what a specific program does on a piece of hardware.
- **Gameplay:** This is the first layer unique to games. It describes how the software functions as a game. Gameplay is subdivided into: Positions, resources, space, time, goals, obstacles, knowledge and rewards and penalties.
- **Meaning:** The “semantic meaning” of the game.
- **Referentiality:** This layer is unique enough to quote the source description. “Here we target the characteristics of the game setting and genre. These characteristics are signs, ornaments or game structures that have originally been used in other media or other games, and which have been put into use in the game we are about to analyse.” (96) The notion of reference as ornament is particularly relevant to a vocabulary of fun that seeks to describe real world architectural features. However, the direct sense of this category is how things in a game refer to things outside of the game, particularly other games.
- **Socio-culture:** Like the “referentiality” layer, this layer expands the scope of reference to all possible cultural objects.

To this list of layers, Konzack adds the notion of the virtual space and the playground, as two modifiers to his primary terms. He sees virtual space as the elements that make up the actual game, such as the board and pieces in Chess. The playground is the surrounding context, including the players, the table on which the game is played and the overall context for play.

“If we focus on the virtual space we will be able to see the aesthetics and make-believe of the computer game, and if we focus on the playground we will be able to observe the culture around computer games.” (2002, 90)

The grain of Konzack taxonomy seems too coarse, however, the perspective too broad. To offer a complete framework for discussing all games, the terminology must also anchor in game structure as experienced by the player. And while his system seems to recognize this, the scope is ultimately too wide and only provides general brush strokes when creating its picture. To his credit, Konzack clearly wants to avoid a more common trap when talking about games—structural reductionism: “(T)here is computer game criticism, which has only focused on functionality thereby giving no clue to what is going on in general “ (98). On this point we can extend Costkiyan’s notion that a complete critical vocabulary will include both structural anchors in games as played, but also requires context in which those game elements situate.

The work of Aarseth, Smedstad and Sunnanå seeks to expand the descriptive typology of games with a method capable of describing all games with a specifically structural system. Their comparative methodology makes claims to functional completeness and open-ended expansion. The result of this effort are 13 categories organized under five major groupings.

“The dimensional categories and their values are gathered by taking two similar games, say *Morrowind* and *Diablo*, and then try to describe the difference between them in a principal way. If this is possible, the principle is extracted and applied to other games. If there are games that do not fit either categorical value, a third value is introduced, or if this is not possible, the dimension is rejected as too arbitrary. The process is repeated until a suitable list of categories and values have been compiled. (Aarseth, Smedstad, and Sunnanå 2003, 49)

The 13 categories, grouped under five headings, include:

- **Space**

- Perspective: The player's point of view in the game. Either omnipresent—the player can see everything, or vagrant, the player can only see parts of the game space.
- Topography: The physical shape of the game space. The space is either geometrical, giving the player full range of spatial dimensions through which to move (football), or topological, where movement is constrained by the rules to specific discrete positions (Chess).
- Environment: Whether the game space is changeable by the player during the game making it dynamic. Otherwise, it is static (tennis).
- **Time**
 - Pace: The sequencing of game play. Either real-time, where all players and game agents act at the same time, or turn-based, where players take turns acting while other players and game agents wait.
 - Representation: How time is represented in the game. Either arbitrary, where the flow of time only relates to the game state or mimetic, where game time is meant to reflect the flow of real world time.
 - Teleology: The final goal of the game in the sense that it is either finite, with a clear victory condition that ends the game or infinite, where the play continues without an established end (World of Warcraft).
- **Player Structure**
 - Player Structure: The organization of players into groups, including single player, two-player, multiplayer, single team, two team and multi-team. Further, these player groupings align into “against none” or “one or more

adversaries”. This matrix of structure offers possibilities such as single player/no adversary games (Tetris) as well as multi-player/multiple adversary games (relay race).

- **Control**

- Mutability: A game reward that strengthens the player’s position in the game. These rewards are either power-ups, temporary increases in player position, and experience-leveling, increases that remain in place for the duration of the game.
- Savability: Whether or not a game state can be saved and restarted at a different time, often restarted many times from the same point. Savability is broken down into: Non-saving, games that cannot be saved and restored; conditional, games that can only be saved at specific points in the game; and unlimited, games that can be saved any number of times at any point in the game.
- Determinism: Whether or not the game uses a random function to determine game states. Deterministic games present the same situation each time you play, non-deterministic games present different situations each time you play. The authors note that all multiplayer games are non-deterministic because of the unpredictability of the opposing player.

- **Rules**

- Topological: Game rules that relate to specific spatial locations of the player, such as a Chess piece on a board.

- Timebased: Game rules that depend on the passing of time, such as a clock in a sporting event.
- Objectivebased: Rules that define specific outcome for players to achieve.

This comparative system has a couple of obvious strengths. First, its use of a binary system of variables to define each of its categories enforces some precision in the classification of game features. Second, the focus on experiential elements over more structural aspects of the game—such as the code base the game might run on—promises to clarify the difference and similarities in games along the dimension of the player’s experience. Still, the authors admit that several of their categories are somewhat reductive, simplifying more complex or shaded nuance the categorized element might demonstrate in practice. Further, while the emphasis is on the player’s experience, the system misses obvious game experience categories such as graphics and plot.

Djaouti et al constructed a database of 588 games in support of the discovery of a “definition of a common language suited to videogame.” (Djaouti et al. 2008, 1). Their method specifically ignored anything internal to the player and instead looked at directly observable interactions possible between the player and the game. As a result of this method, their approach focuses almost exclusively on the notion of interaction. Their large scale analysis of the possible interaction elements in games led them to distill the most common types into a series of 10 “game bricks,” including: Avoid, manage, random, shoot, create, destroy, match, write, move and select. Each of these bricks is characterized by an input state and one or more possible outputs.

Each brick, the authors argue, is a rule template. While there is variability in the template as it applies to different games, the fundamental nature of the template can be

observed as an abstraction across many different game types. So, for example, Pac-Man features the “avoid” brick, as in, “avoid the ghosts” in the same sense that a racing game such as Need for Speed: Carbon uses the same rule template, “avoid hitting other cars and roadside obstacles.”

Combinations of these bricks allows for an additional layer of “metabricks”, such as the combination of avoid and move into the metabrick, “driver.”

Their model, while helpful in terms of breaking open the concept of interaction, falls short of its aim to provide a language of gaming in two key areas. First, the methodological focus on interaction leaves out broad areas of the gaming experience, such as narrative and any aesthetic dimension. Second, even the authors recognize that their system is overly reduced: “... in order to obtain an efficient classification we could not make a brick for every existing rule template.” (2)

However, their ongoing research and cataloging of games at <http://www.gameclassification.com> continues to bear out strong self-similarity of game types along the 10 brick typology they propose.

The Game Ontology Project covers similar ground, but seeks to correct the problems of earlier descriptive systems. In between a system too general to be of specific use and too granular to make systematic comparisons between different game types, the Game Ontology Project elaborates a method that looks to uncover common elements in games, clarify their relationships and to then organize these elements into a hierarchical system. This approach, borrowing from ontological organizational systems in computer science, the GOP clearly separates itself from the more taxonomic approaches implied in any genre system. “An ontology is different than a game taxonomy in that, rather than

organizing games by their characteristics or elements, it is the elements themselves that are organized.” (Zagal et al. 2005, 2). The benefit of this approach is described as contributing to “a vocabulary for describing, analyzing and critiquing games.” (2)

Methodologically, the GOP focuses on describing the central aspects of the game experience by observing what players actually experience during game play. As they state, summarizing the core of the method employed in creating their ontology: “The purpose of the Game Ontology Project is to categorize things we see in games. More specifically, it defines and classifies the things essential to the ‘gameness’ of games.” (2)

By focusing on what players perceive or experience in games, this project derives elements that we can say are a part of the vocabulary of fun. If games are fun, and the GOP helps describe the experience of encountering a game—whether playing or watching it—the ontological terms that result refer, at some level of focus, to the pleasure, or fun, of playing games.

The resulting hierarchy features five top-level terms or categories:

- **Interface** describes the conceptual surface where the player interacts with the game or game software. “It refers to both how the player interacts with the game and how the game communicates to the player.” (4)
- **Rules** define the basic structure of the game and “what can and can’t be done”. (4)
- **Goals** focus the purpose of the game by clarifying the “objectives or conditions that define success.” (4)
- **Entities** identify the elements in a game that the player “manages, modifies or interacts with”, noting that this interaction may be direct or indirect—in cases

where the player action causes changes to the games system state which thereby affect the entity. (4)

- And finally **entity manipulation** refers to the actual possible actions, as defined by the rules, which a player can perform on entities. “Entity manipulation thus refers to the actions or verbs that can be performed by the player and by in-game entities.” (4)

These top-level ontological categories then provide a framework for a series of catalog entries nested inside the various categories. To date, the project has defined over 150 entities (<http://www.gameontology.org/>).

This descriptive approach offers a variety of points of entry for analysis and design of games. However, the method also admits to certain limitations. In one key area, for example, the ontology avoids entirely the notion of narrative in games as a framework category. Even as the authors note, “A deep reading of any one particular game would require an analysis of its representational, conventions, allusions and connotations.”(4)

Without discarding the obvious utility of the GOP as a source for critical game vocabulary, the project lacks a comprehensive view of games through its omission of critical game contexts and narratives.

Similarly, the Game Design Patterns movement, embodied in the work of Björk and Holopainen, looks to provide tools to help game developers “understanding and creating games” (2005, 3)². They approach the perceived lack of game design terms with

² The game design pattern approach was inspired by the software design patterns movement—an effort to identity and document common patterns in software code to help improve the speed of development and

a consistent set of terminologies organized into what they call “game design patterns.”

Presumably, game design patterns would also form a critical vocabulary useful in talking about games.

As such, their approach to atomizing games into structural elements favors more abstract design-focused categories somewhat removed from the experience of the player in the game. For instance, their conceptual framework describes four major categories of interest:

- **Holistic** : The game as an un-dividable activity
- **Boundary**: Similar to the rule and entity manipulation categories of the GOP and focused on what the player can and cannot do in the game. Also touches on the notion of goals.
- **Temporal**: The time elements in the game, summed as the “flow of the game”.
As a result, this category also focuses on the concept of action, which relates back to the GOP notions of rules and element manipulation.
- **Structural**: Similar to the entity category in the GOP.

This approach subtly moves away from the notion of a vocabulary of fun by its de-emphasis on the experience of playing a game and its focus on “design choices possible in games.” (3) They go on to emphasize that their method uses “the term game design patterns instead of gameplay patterns to stress that these are patterns of interaction which are intended by the game designer....” And while they often observe these patterns

reliability of computer programs. The software patterns movement was directly inspired by Christopher Alexander’s pattern language work. And while this relationship between game design patterns and environmental patterns is notable, elaborating on the connection is beyond the scope of the current argument.

during actual moments of game play, the focus remains on the structure of the game as defined by the designer's intention. This fact does not limit the notion of game design patterns as a method for understanding games, and clarifying game design approaches and outcomes. But it does limit the utility of the system as a standalone descriptive vocabulary of fun.

Järvinen looks to expand upon these more structurally-focused methods by including the player's experience as a key component in his analysis. This user-focused approach applies a more sociological lens to games. The resulting set of categories promises to provide a broader set of analytical terms than those discussed previously. By looking at games as a system including the player's experience, rather than simply a set of structural elements, we come closer to the notion of a vocabulary of fun—the sorts of terms which describe the act of playing a game, rather than simply articulating a design language of constructive terms that aid designers in creating these fun experiences. As he describes his organizing premise:

“First, that any kind of game can be identified through a limited number of structural features called game elements. Second, the experience of playing a game can be analysed with a set of ‘psycho-ludological’ concepts, i.e. psychological principles adapted for the specific purpose of analysing play in games.” (Järvinen 2007, 134)

This method then “emphasizes the behavior of players, and the contexts where the game takes place, rather than the inner workings of the system.” (134)

Järvinen goes on to describe nine categories of game elements that he describes as “found throughout the universe of games.”

- **Components:** This category is analogous to the Game Ontology Project's entities, or objects players manipulate in the game.

- **Environment:** The play space, whether a board, game level, court or pitch.
- **Ruleset:** Almost identical to the GOP's category of rules, except that this category also includes the idea of goals as well.
- **Game mechanics:** Equivalent to the GOP category of "entity manipulation".
- **Theme:** The narrative context for the game, or the "metaphor for the system and ruleset." (134) This notion is absent from the GOP, and makes the narrative content of the game dependent in some sense, on the underlying structure of the game.
- **Information:** The various data that the game system and or the player stores or knows in order to play the game.
- **Interface:** The means by which players act on the game world—such as through the computer user interface. However, interface does include direct manipulation interfaces, such as physically moving pieces on a board.
- **Player:** The player of the game.
- **Contexts:** Things outside the other categories which provide the setting and situation of the game.

A particularly interesting aspect of this categorical system, and one that provides insight into the problematic business of distilling games down into discrete elements, is the contingent nature of many of the parts of games that Järvinen identifies:

"Ruleset, Game mechanics, Theme, Interface, and Information are compound game elements, which seldom exist as such, but they exist as embodied into other elements. Their compound nature means that they keep the dynamic whole together." (135)

From this basis, Järvinen builds a method for game analysis, but otherwise does not deal with elaborating on the vocabulary itself. Instead, these categories are further defined in support of his method, much like the Game Ontology or the Game Design Patterns.

These analytical systems have value in structuring analysis and design efforts. But what they lack is a clear ability to provide a descriptive language capable of answering the question, “What makes a game fun?” Much as Costikyan and Sakey asked for a critical language, these classically ontological and structural descriptive systems do not comprise complete critical vocabularies on their own.

What is needed is a critical videogame language—a language of gaming fun.

Salen and Zimmerman’s influential “Rules of Play” (2003) offers an encouraging thesis promising to provide a framework for all play, from playgrounds and sports fields to brain teasers and board games. Looking for a global set of rules of play, they suggest that something underlies the wide variety of cultural forms we call play.

Despite the wide reach of their research and the obvious benefits of their findings, early on in their treatise they clearly state their focus. “One way to describe the project of this book is to say that we are working to establish a critical discourse for *game design* (emphasis not in original).” (2) In other words, their project is to support the design of games, rather than specifically develop a system for talking about the experience of how games are played.

Their approach proposes three primary schemas-- **rules**, **play**, and **culture**-- described as:

“Rules contain formal game design schemas that focus on the essential logical and mathematical structures of a game. Play contains experimental

social and representational game design schemas that foreground the player's participation with the game and with other players. Culture contains contextual game design schemas that investigate the larger cultural contexts within which games are designed and played.” (6).

Inside this broad organizational framework, Salen and Zimmerman structure a variety of subtopics. For example, under rules they discuss games as emergent systems, games as information theory systems, games as game theory systems and games as systems of conflict. Under play they discuss games as the play of experience, games as the play of pleasure, games as narrative play and games of social play. Under culture they explore games as cultural rhetoric, games as cultural resistance and games as cultural environment.

Despite the breadth of their discussion, they remain intentionally non-systematic in their exploration of their game schemas:

“Practically speaking, defining terms is useful. But an overemphasis on definitions can be dangerous. Held in too orthodox a manner, definitions become a way of shutting down communication and insight. For us, a definition is not a closed or scientific representation of ‘reality.’ For a designer, the value of a definition is its ability to serve as a critical tool for understanding and solving design problems. In other words, by including definitions, our intention is not to exclude other definitions that might complement or contradict our own. We wholeheartedly acknowledge that our definitions, concepts, and models leave some things out and work better in some circumstances than others. But this doesn’t lessen their overall utility.” (3)

This passage illuminates a few key points. First of all, the intention of the “rules, play, culture” schema is not to provide a comprehensive vocabulary for discussing games, but rather to propose a playing field for exploring the subject. Second, the authors make it clear that their intention is to serve the designer—whether or not this end directly engages the player’s experience is not the primary concern.

At the same time, their interpretation of the method for clarifying the underlying principles of play does emphasize the importance of informality. So, to the developing criteria of a critical game vocabulary we might add the notion of inclusive informality. That is, while a critical vocabulary must find structural anchors in the experience of play, the context varies enough that strict formal systems will inevitably exclude or ignore aspects of meaning in game play.

As a further implication of Salen and Zimmerman's work, it is clear that the language of games splits into two camps—the language of design and the language of experience. And while the two forms are always intertwined, the intention of each system of knowledge is dedicated to a different end. For design, the goal is reaching an understanding as to how to make. For experience, the goal is to understand how the game is played and perceived. On one hand we have the production of fun machines, on the other fun itself.

Because it appears that the question of fun is more one of experience—players playing the game rather than the game as an artifact at rest—with the design of that experience taking a secondary role, the question turns to the search for an more dedicated experiential language of fun. Incomplete and only sketched, Thomas provided such a set of terms. His “Critical Game Elements: A Vocabulary of Experience” (Thomas 2003) proposes to,

“...form a comprehensive lexicon of the gaming experience by giving a term or category to catalog all aspects of the experience. The terms can be used as a critical inventory for game reviewing, as a starting-off point for research and to illuminate the user experience during game design. But perhaps most important, these terms can provide a common ground for connecting the various inquiries that come into the field.” (NP)

His collection of categorical terms, while incomplete and, much like Salen and Zimmerman, non-systematic, still provides a promising basis for developing a complete and rich vocabulary of fun. The critical game elements include:

- **Genre:** A collection of game conventions that establish and reinforce expectations in players.
- **Camera:** A rendered, visual perspective into the game world that typically models a common optical perspective of a film camera.
- **Point of view:** Similar to literary point of view, but specific to a visual point of view such as first person where the player does not see the entire in-game character, or third person, where they do.
- **Interactivity:** The classic communication loop consisting of a sender, a message, a recipient, and a response.
- **Algorithm:** Following the standard definition of an algorithm as a “procedure that guarantees an outcome,” this category defines itself more simply as the “formal set of rules the game follows.”
- **Ergonomics:** The physical interface for interacting with the game, including joysticks, gamepads and steering wheels, but not including the visual interface.
- **Interface:** Related to ergonomics, the interface is the human computer interface used by the game to display information and for the player to issue commands.
- **Overhead:** The activities required to initiate the game. Includes any set up activity prior to the start of the game.
- **Graphics:** Related to camera perspective, graphics refer to the overall visual design or style of a game.

- **Animation:** Related to graphics, animation deals with the motion of graphics in the game.
- **Sound:** All aural information in the game, except for music and synonymous with sound effects.
- **Music:** The game's musical accompaniment.
- **Character:** Based on the assumption that all games have a point of view, this category assumes all games have at least one character, even if that character is simply the player (Tetris). Characters are the actors in a story.
- **Narrative:** The game's plot or storyline.
- **Setting:** The game world, similar to narrative setting.
- **Space:** The spatial arrangement and design of the game setting.
- **Time:** The passage of time in the game world as measured against the passage of real world time.
- **Social:** The interaction of people while playing the game, both directly as well as mediated through the game system.
- **Rewards and Consequences:** The "pay off" or positive reinforcement of playing a game and the corresponding negative reinforcement for failing. Includes winning, but can include any other positive or negative emotion stemming from the play.
- **Ex Machina:** This category loosely refers to the narrative term, *deus ex machina*, and liberally applies the concept to anything external to the game system, but related directly to the game, including Easter eggs, game guides, mods and cheats.

- **Business:** The commercial concerns that surround a game's production and form, including price, distribution and platform availability.

The strengths of this system include a more detailed approach to describing the context surrounding game play, including elements such as business, ergonomics and overhead. Also the informal approach mirroring Salen and Zimmerman fits with the notion of a vocabulary that seeks to integrate different domains of knowledge, rather than to simply carve out some isolated semantic space.

But the informality also raises questions. How was this set of critical terms derived? By what method would it be extended? Further criticism would point to the overly broad definition of its terms and the obvious incompleteness of the detail in each of the term categories.

Still, like many of the other taxonomic system, this critical vocabulary offers insight into one of a myriad of ways of looking at and talking about games.

Building a Vocabulary

Even a casual glance across the landscape of game vocabulary will reveal a diversity of terms, concepts and approaches. This diversity is driven in part by variety in purpose, methodology and selected perspective. Some of the approaches treat the subject of games from a social point of view, others from a psychological basis and several from a positivistic structural perspective. Philosophical methods of inquiry are readily mixed with more observational techniques. The end result feels like a competitive mishmash of terms, each struggling to own the description of the object at hand—games.

Fortunately, because these descriptive and critical vocabulary systems all focus their attention on the same subject, we can assume some underlying commonality or point of focus in the midst of the conflicting cacophony.

Comparing the divergent descriptive systems, looking for terms that define clear categories and matching up similar categories should help bring into focus points of contact between the various systems and derive a more common vocabulary useful for describing games. A comparative effort at synthesizing these various game vocabularies will also build up a spine of a language of fun.

Placing each of the vocabulary systems on a matrix, looking at descriptions and definitions of each term in their original use and matching up terms that generally, if not wholly, describe the same thing, certain common areas of focus appear (see [Table III.1](#)).

This approach reveals that terms such as “player”, “rules”, “goals” and “space” appear multiple times up across the various systems. And the comparisons also shows that terms as diverse as “control”, “entity manipulation” and “boundary” can easily be grouped under the term “mechanic.” Grouping of these terms allow a system of general categorical terminology to emerge.

While this process of grouping together the common terms and ideas that appear across one or more of the vocabulary systems is necessarily interpretive and translational, the end result does help us come closer to distilling a common vocabulary. More important, this common vocabulary can produce descriptive depth in its ability to relate back to the variety of approaches embodied in each of the individual systems. The common vocabulary, then, is merely a management context for the discussion of games, one that does not unnecessarily exclude a variety of approaches.

Table III.1 Primary videogame vocabulary terms

Note, items in italics are groupings of terms

* “Boundary” has two senses in Björk and Holopainen’s usage, so appears twice in this matrix

Klabbers	Konzack	Aarseth	Djaouti	Zagal	Björk	Järvinen	Salen	Thomas	COMMON
Actors		Player Structure				Player			Player
Rules		Rules		Rules	Boundary*	Ruleset	Rules	Algorithm	Rules
Resources	<i>Gameplay:</i>								
<i>Resources</i>						Components			Entities
	<i>Gameplay: Space</i>	Space		Entities	Structural	Environmemnt		Space, setting	Space
	<i>Gameplay: Time</i>	Time			Temporal			Time	Time
			Interaction					Interactivity	Interactivity
	<i>Gameplay: Goals</i>			Goals					Goals
		Control		Entity manipulation	Boundary*	Game mechanics			Mechanics
						Theme		Narrative	Narrative
	<i>Gameplay: Knowledge</i>								
				Interface		Information Interface		Interface	Information Interface
	Socio-culture					Contexts	Culture		Cultural context
		<i>Space: Perspective</i>						Point of view	Point of view
	<i>Gameplay: Rewards and penalties</i>							Rewards and consequences	Rewards and consequences
	<i>Gameplay</i>						Play		Gameplay

Of course, not all terms from each system readily map terms in other systems. Some terms are clearly unique to their original context or provide a fundamentally different perspective on one of the primary terminological categories. For instance, Konzack proposes “meaning” as one of his key terms. And while the other systems deal with different types of meaning, only this system singles out the term as a primary, definitional category. Likewise, Thomas’ inclusion of “genre” and “business” do not have clear analogs in the other systems. As a result, a second matrix provides a context for considering the remaining terms as “secondary terms” (see [Table III.2](#)). Because these terms appear to be unique to one system, we can either conclude that that they are truly secondary, in the sense of working as sub-categories to the main terms; we can assume that the terms are marginal with regards to the understanding of games or; we can admit these terms as unique contributions to the development of a critical vocabulary of games. At this point, leaving these possibilities unresolved, the secondary matrix acts as a necessary contingency, not specifically devaluing the terms, but holding them for future consideration.

Table III.2 Secondary videogame vocabulary terms

Klabbers	Konzack	Aarseth	Djaouti	Zagal	Björk	Järvinen	Salen	Thomas	COMMON
	Meaning								Meaning
	Referentiality								Referentiality
								Genre	Genre
								Camera	Camera
								Ergonomics	Ergonomics
								Overhead	Overhead
								Graphics	Graphics
								Animation	Animation
								Sounds	Sounds
								Music	Music
								Character	Character
								Social	Social
								Ex machina	Ex machina
								Business	Business
	<i>Gameplay:</i>								<i>Gameplay:</i>
	<i>Positions</i>								<i>Positions</i>
	<i>Gameplay:</i>								<i>Gameplay:</i>
	<i>Obstacles</i>								<i>Obstacles</i>
		<i>Space:</i>							
		<i>Topography</i>							
		<i>Space:</i>							
		<i>Environment</i>							
		<i>Time: Pace</i>							
		<i>Time:</i>							
		<i>Representation</i>							
		<i>Time: Teleology</i>							
		<i>Control:</i>							
		<i>Mutability</i>							
		<i>Control: Savability</i>							
		<i>Control:</i>							
		<i>Determinism</i>							
		<i>Rules: Topological</i>							
		<i>Rules: Timebased</i>							
		<i>Rules:</i>							
		<i>Objectivebased*</i>							
	Hardware								
	Program code								
	Functionality**								

Note, items in italics are groupings of terms

* The sub-categories in Aarseth's system fit wholly within their parent. As such, they are best considered inside their primary category rather than as standalone categorical terms.

** Konzack notes that these layers in his system are not unique to games, but to software itself.

Taken together, the primary and secondary term categories produce 15 primary and 16 secondary terms. While certainly incomplete, a core vocabulary of fun including 31 terms appears both manageable and broad. This new collection is both informal in the sense of supporting discussion and it is also anchored in specific elements of a game in play. As such, this act of distillation provides a vocabulary that can stand as a workable systematic, categorical, vocabulary of fun.

Just as important, this vocabulary contributes to a broader descriptive language used to talk about games. As such, these terms are neither exclusive nor comprehensive as a set of terms for talking about fun, play or games. For example, to describe the motivations a player brings to a game, you might rely on a bevy of psychological terms. When talking about the question “What makes a place fun?” the specialized vocabularies of architectural discourse will come into play.

In this sense, the terms proposed here are both additive and focal—providing a means to emphasize the notion of fun in subjects outside of games by contributing new, and unique, terms to describe those features and concepts thereby contributing to understanding of fun as a more global concept.

Conclusions

Why search for a common vocabulary of games and fun? Certainly, there are disciplinary benefits to owning definitions. If the terms of the discussion favor one perspective or stance, then certainly, that gives the discipline which owns those definitions standing amongst any intellectual competitors, poachers or colonists. But past the petty boundary squabbles, the benefit of a common language of games is, as Klabbers suggest, an exercise in clarity and interdisciplinary connection:

“As gaming is so ingrained in human culture and nature, the language of gaming whether for fun or for scientific endeavour is similar. This is an advantage and a disadvantage. It is an advantage because everybody understands their general meaning. It is a disadvantage, because in science that meaning is most of the time different from ordinary use. So, there is a real chance that people think they understand each other, because they use similar terms, while actually they are talking about different things.” (2003, 55)

With the thrust of the current research in connecting games to environment through the proposed concept of a common language of fun, the benefits of developing such a common language should be clear. If we can descriptively, critically and conceptual evolve a semantic notion of fun, then we can borrow and lend between different domains. If there is some common basis for talking about fun, the knowledge about what makes games fun can inform a discussion of what makes places fun.

IV. METHOD

Connecting Play to Place

If fun is a function of play and games, as has been suggested, then asking “What makes a place fun?” is really a short hand for more nuanced questions about play and games.

The question, “How does a place inspire or facilitate play in the player?” provides another form of the same question. In this sense, a place becomes a material context for play, and that material organization is interpreted through culture. Looking for fun in the play of people in and around buildings as material and cultural constructions requires some method which connects architecture to play.

And if the proposed method for answering this question is critical and descriptive, then the terms used to anchor those connections to play in the material world should have clear expressions and visible instances. If a place can have a *ludus loci* knowable by the player, then it is not purpose of a critical vocabulary of fun to define this spirit, rather to describe and elaborate on it. We can observe people at play in places, having fun, and then we construct and evolve a language of fun useful in describing what we have seen.

In this chapter, the goal is not to develop a new descriptive language of architecture rather to expand the language of place to include terms, notions and concepts that allow us to more fully understand a playful place—a fun place. And while some of these terms will emerge and be found useful by looking at similar descriptive frameworks in games, other approaches from the broader field of play and leisure studies will also find a place. This method connects the notion of game as machine for creating fun to place as a machine for creating fun. Games, then, becomes a reference model for the

discovery, interrogation and production of understanding (and ultimately design) for fun places.

The project at this point is to develop an initial set of anchor terms and concepts, borrowed from the active dialog about play, fun and games, and to develop these terms and concepts into an initial system for describing play and fun as it relates to architecture. In doing so, the current study will provide a basis for exploring, talking about and ultimately understanding fun places.

To reach this end, this section divides its inquiry up into a review of key definitional concepts, a description of play, fun and games, and completes with a detailed examination of the structure of games as a method for understanding play and fun in human environments.

Core Concepts

Because the proposed approach is fundamentally rhetorical, a review of the key concepts along with an effort to clarify key definitions will ensure a higher level of fidelity in the arguments as they look to link game concepts to those in architecture.

Fun

Fun is best described as the experience of a certain kind of ambiguity or paradox that creates a freedom of conceptual space between something and its contraction. This is referred to as the is/is not construct demonstrated clearly, for example, by picturesque faux ruins meant to be seen as old at the same time they are understood as contemporary. Fun then is an experienced effect, contingent on an almost endless number of possible contexts and dependant on the interpretation of the person experiencing the effect.

Fun, then, could be considered the aesthetic of play, the goal of games and an end in itself. While primarily a sense experienced in the player or funseeker, fun is not merely a psychological construction any more than beauty is. Further, as a pursued phenomenon, it transcends the constructions we erect to conjure it. So, playing games is fun. But so is watching a movie, taking a nap or stealing a kiss. Fun is a fundamental category of human experience and understanding.

Games

Games here are understood as machines for generating the is/is not in its players and observers. Not all fun machines are games, however. Games belong to a specific form of fun machine. Likewise, there are different forms of fun machines (such as film and literature) outside the scope of, but in some sense similar to, games.

Play

In the context of fun, play is the act of promulgating the conditions required to maintain the is/is not construction of fun. Play then can be read in three specific contexts—of play, for play and at play. Of play points to things that may or may not be related to play, but were created as a result of play. An architect may “play with a design” in the true sense of the word play, even though the final output is not meant for play. The for play construction points to people, acts and things employed during play to generate and maintain the fun. A playground clearly exists for play, whether its design was produced of play or through a more serious method. Finally, the at play sense points to actual play. Kids running through the sprinklers are at play in the same way that visitors viewing the for play 3D façade of the New York, New York hotel in Las Vegas can be said to be at play.

Along these lines, when applying the of play, for play and at play concepts to architecture, a further division is necessary to make the application of these terms clear. Architecture has both a material and cultural context.

As material objects, buildings are identifiable outside of their culture role, designed purpose or day-to-day use. A school can be used for education, entertainment and incarceration. You can keep wild animals in a factory and make shoes at the zoo. The study of fun and place needs to consider the material properties of place in terms of the afforded actions that material organization allow (like swinging on a swing set or climbing on monkey bars) but also the relationship of that material organization to its cultural context.

Because buildings are architectural objects—material objects existing inside of a cultural context that shapes their meaning and use—the role of play also present in this context. Stone walls topped crenellated fortifications and penetrated by massive arched portals are a collection of material objects or features. The context of a castle allows this material form to be understood as a historical fortification or a site for fantasy. And while certain material organizations preference certain cultural forms—prisons rarely are made from tent fabric—the dichotomy between material and culture in architectural objects is almost comprehensive. In the correct context, any material object can work within any cultural system to create an architectural organization. This is where we look for fun.

As a result of this operational distinction between material and cultural objects, the question, “What makes a place fun?” might be more helpfully written as “What makes one organization of material objects in culture more fun than another?” The consequence of this claim is that the argument about fun is phenomenologically focused.

By the same reasoning however, this does not suggest that the study of fun and place lies outside of architecture. Because just as games can be considered machines for generating fun, and those game machines are also constructed of material and culture, so too can we use the tools of architectural theory, history, criticism and design to discuss buildings and places as machines for generating fun. And just as we play games, we can also be said to play place—at least in the sense of the player interacting with an architectural machine or system in pursuit of fun.

This point also helps clarify a key issue around fun and the is/is not. The affirmative condition of the is does not necessarily equal the material or “real” object. Rather, the is always sits in relationship to some sort of material perception or cultural construction to which the is not can contradict. If you had never seen a castle, nor had any knowledge of what a castle was or was meant to represent, then Cinderella’s Castle in Disneyland might be awe inspiring, but it would not pluck at the same is/is not strings of someone who grew up in the frame of Western fairytales and history. Likewise, buildings that seem to defy gravity or feature contradictions of materials that defy the common sense perception of material load can create a similar sense of ambiguity or paradox experienced as fun.

Along these lines, the is/is not of fun works through a series of cultural norms and experience of the physical and then a transgression of these norms and expectations. So, the notion that “any ambiguity is fun” is not the case. At least, some norm and transgression pairs are more powerful and potentially more fun. Looking at Cinderella’s Castle in both a corporate and historical contexts, then transgressing those contexts

through a fairytale narrative and façade performs a more interesting ambiguity that a child's sandcastle on the beach. But in both cases, you have a castle that is not a castle.

Finally, as a consequence of the operationalization of these key terms the present method only proposes a specific system of use, and does not claim a best fit for all uses of the terms and all meanings for all people across all cultures. That is, this is simply one way of thinking about fun, a way that may be an American notion and may simply be a system of convenience.

Framework Concepts

Sociologist Roger Caillois penned one of the most widely used models for thinking about the cultural relationship between players, games and play. Any study of play or games unavoidably must cross through Caillois rubric. (Caillois 2001)

Caillois offer two complimentary schemas for thinking about games.

All games and types of play, he argues, fit between two poles—*paidia*, the uncontrolled and effortless play of the child and a wild imagination and *ludus*, the structured, civilized channeling of *paidia* through rules.

Attempting to understand play and games from a sociological perspective, Caillois erects a progressive theory of play. Because much like Huiziga's idea that play and games underlie culture, Caillois sees the evolution of play from the uncontrolled and unstructured acts of the infant and small child through the cultured, structuring of play with rules. What starts in play matures into games.

“In general, the first manifestations of *paidia* have no name and could not have any, precisely because they are not part of any order, distinctive symbolism, or clearly differentiated life that would permit a vocabulary to consecrate their autonomy with a

specific term. But as soon as conventions, techniques, and utensils emerge, the first games as such arise with them....the pleasure experienced in solving a problem arbitrarily designed for this purpose also intervenes, so that reaching a solution has no other goal than the personal satisfaction for its own sake.” (29)

This condition he calls *ludus*.

From *paidia*, Caillois derives the impulse to play and from its eventual development in *ludus*, he finds games, a creative source in a cultured, civilized form. Of course, it is important to remember the focus of Caillois’ study. He does not attempt to reconcile all of culture through the lens of games and play, but rather seeks to find a role for play and games in culture. This allows us to make a claim regarding the relevance of *ludus* to the interpretation of architectural form. *Ludus* is a functional and descriptive term we can expand for talking about architecture connected to play and games. In the scope of this research, “ludic architecture” exhibits the regulated structure of architectural form, but always mediated by the free spirit of *paidia*.

When he says of *ludus*, “This latter principle is completely impractical, even though it requires an ever greater amount of effort, patience, skill, or ingenuity....” we can see the echo of the architectural folly. The Watts Towers, or the Winchester Mansion, exhibit admirable amounts of “effort, patience, skill or ingenuity”. But they lack a practical aspect and are labeled folly. They are also *paidiaic*, filled with the spirit of play.

The folly, in this description could be labeled “ludic architecture”—architecture at play, for play or of play.

And just as Caillois sees *ludus* and *paidia* as two poles in his play theory, so too can we describe places as primarily ludic or paidiaic—more structured as in games or free as in child’s play.

Caves and Sand

In the southwestern United States, nestled into the giant geological playground at the southern end of New Mexico, sit two jewels in the necklace of American National Parks—Carlsbad Caverns and White Sands National Monument. By almost any standard of natural beauty or sheer scale, Carlsbad and White Sands never fail to impress.

The Carlsbad Park was established in 1923. The caves themselves emerged from a 250 million-year process that started as a living reef in an ancient ocean. Carlsbad Caverns features modern developments such as a massive staircase and trail dropping down the mouth of the cave (replacing a rope and bucket), a 705" elevator shaft sunk from the desert floor into the massive cave system and, eventually, an underground cafeteria. Today visitors can spend money in an air-conditioned gift shop, view exhibits or eat lunch in the park restaurant before descending to walk the almost three miles of subterranean black asphalt, hand-railed trail.

Spawned from the same primordial sea lies White Sands’ sweeping 275 square miles of silky white gypsum, deposited for eons in the wide open Tularosa basin in New Mexico. The dune’s expanse is so great that it shows up as a milky blot on satellite photographs of the state. A small outpost welcomes guests off the highway and orients them in a well-worn visitor’s center. After a casual park ranger orientation, cars head out into the sand, following a short winding road to the heart of the dunes. A road plowed through the sand gives visitors automotive access to the dunes’ interior. Parking the

family van on the soft shoulder of the rising sand, doors open and children race up the mounds. Plastic discs designed for snow sledding do double duty as teenagers schuss down the slopes. Squeals of laughter ring out across the rolling, desolate landscape. Here, the land is big, the forces of nature tireless and timeless.

By contrast, at Carlsbad, a sonorous park ranger warns guests as they descend 75-story elevator shaft into the main cavern that they must stay on the trail and remain quiet. Touching a rock in the cave not only draws hundreds of dollars in fines, it can permanently taint or destroy what nature so painstakingly built. Walking in monastic solemnity, visitors take in the monumental glories of an underground empire carved by millennia of trickling water. Handrails guard every inch of the 2.75 miles of blacktop as it snakes from rock formation to vaulted room. Vast networks of lights illuminate stalactites, stalagmites, cones and columns with theatrical purpose, in a production orchestrated by scientists and park rangers. The freely tourable parts of the Carlsbad "show cave" are as well-orchestrated as a Disney Park and in some sense, just as artificial.

Despite their similarities in geography, as federal, natural treasures and destination landmarks for tourists all over the world, each place was crafted to serve a unique purpose. In an effort to preserve the wild and wonderful places of America, the U.S. Park Service has circumscribed the land and constructed a codex of rules. But the rules change to suit the land. In Carlsbad the structures are as meticulous as a tax code. In White Sands, they are as carefree as a playground. But in both cases, there are boundaries set to ensure leisure as a product of the land. This dichotomy between fun found in unfettered play and that emerging from structured deprivation finds a voice and

terminology in Caillois' twin notions of *paidia* and *ludus*, capturing a distinction and a dualism that he saw in all forms of play. He described the spirit of *paidia* as "diversion, turbulence, free improvisation, and carefree gaiety." *Ludus*, on the other hand, stands "At the opposite extreme"(13). Laying Caillois' notion onto the landscape of Southern New Mexico, we easily find the distinction in design between the cave's park and the sands' monument as essentially the distinction between *paidia* and *ludus*. In the sand, the visitor remains free to romp and roam and invent new diversions in the seemingly endless supply of crushed gypsum. In the cave, the viewer finds their pleasures inside the strict rules and dramatic wanderings of the path. In the sand, as in the "sandbox game," freedom; in the cave, a guided path, lit to focus attention on specific features.

This distinction in the way humans treat the natural landscape, on one hand facilitating *paidia* and on the other channeling the free and uncontrolled urges into almost perfectly scripted experience does not set value of one over the other. On the other hand, the distinction between a curated cave and a wild sand dune seems to perfectly mirror Caillois' notion that from the untamed, initial urge to play as a child comes the controlled, contrived and culture-making force of *ludus*.

And from an environmental design point of view, this distinction provides two specific points of orientation. By recognizing the space as one serving either *paidia* or *ludus*, more appropriate decisions can be made to facilitate the use of the space. Also, understanding the nature of these aspects of human play allow the designer more precise influence over the shape of the space while serving either a ludic or paidiaic end.

Types of Games

Though fundamental notions in his system, *ludus* and *paidia* do not provide a comprehensive descriptive system for Caillois. In addition to these concepts, he conceives four additional categories inherent in the study of games and play. Describing these categories as “psychological attitudes”, but meaning something closer to socially observable abstract categories of play and game, Caillois generates the following rubric:

Agôn: Games of competition, such as sports.

Alea: Games of chance, such as lotteries and slot machines.

Mimicry: Games of role-playing and make believe.

Ilinx: Games of vertigo and disorientation.

From these four basic categories, Caillois is able to structure an entire cosmology of play and games. By using this basic schema, he is able to observe the similarity in games that at first seem far apart. So, for example, football and chess both appear as games of agôn while theatrical plays and playing dress-up both fall under mimicry. Because Caillois only offers these categories as descriptive tools for understanding the breadth of games, he is able to easily allow for combinations of game types inside a single game—such as the flip of a coin at the start of football game—a moment of ilinx to initiate a contest of agôn.

Further, he finds these attitudes toward games and play spread between the two poles of *ludus* and *paidia*—the structured and unstructured aspects of play. In this way, he can talk about the ludically structured contests of agôn found in sports and the rough and tumble wrestling of children embodying paidiaic moments of agôn.

The heart of his analytic agenda is to construct a sociological understanding of culture based on what types of games a community plays and in which combination. Rather than reduce his understanding of culture to a few atomistic game categories and the tendencies of *ludus* and *paidia*, he instead reflects Huizinga in suggesting that a significant, but not totalizing, aspect of culture is the games its people play.

“I do not mean to insinuate in any way that cultures are like games and therefore also governed by *agôn*, *alea*, *mimicry*, and *ilinx*. On the contrary, I maintain that the domain of play after all constitutes a kind of islet, artificially dedicated to calculated competition, limited risks, inconsequential make-believe, and meaningless panic.” (85-86)

From this we can see that for Caillois, play is not all. But following his argument, it is fundamentally important. And within the frame of the current analysis, Caillois offers a way for understanding fun— knowable inside basic categories, essential to culture, but simultaneously outside of the culture that it helps define. In a word, games and play are fun—the thing this both is and is not.

Inside this fundamentally cultural role, the sociological explanations that Caillois offers do not speculate about the applicability of his categorical rubric to specific cultural forms. But the application is appropriate and necessary. Whether or not Caillois had architecture in mind as he conceived his analytical system, it seems obvious that as a critical culture-making and culture-supporting force, architecture becomes an expression of the types of play he hopes to describe:

“...I also suspect that the principles of play, persistent and widespread mainsprings of human activity, so much so that they seem constant and universal, must markedly influence different types of society.” (86)

If the games a culture plays help define the nature of that culture, then do the fun buildings a culture constructs also help define along the same lines? We tend to think of the folly as a peculiar by-product or abreaction of the culture proper. But to follow Caillois is to suggest that the fun buildings a people create, not only expresses something specific about the general orientation of that culture, it also helps define a frontier, direction and possibility for that civilization.

This mirrors Smith's notion of models, and by proxy games', nature as a machine for generating knowledge. Our fun buildings, our follies, not only help define the boundaries of the orthodoxy, they also act as valve between the certain and the possible. This is to say, if *agôn*, *alea*, *mimicry* and *ilinx* influence a society, then they must be present in the artifacts of that society, from law and cuisine to art and architecture. The question then is less, "Does Caillois' rubric apply to the built environment?" but more, "How does it?"

An Environmental Rubric of Fun

Because Caillois' interest ultimately lies in understanding the varieties of culture through the lens of games, he does not make a critical distinction about play artifacts in culture that are not specifically identified as games.

To apply Caillois' rubric to the notion of playful places, we must consider his categories in three senses of play previously discussed: "at play", "for play" and "of play." These distinctions recognizes that while the play instinct may underlie many aspects of cultural development, as Huizinga argues and Caillois agrees, the same play instinct can also produce intentionally playful artifacts and, at times, be put at play itself. So where *agôn*, for instance, can be seen as the competitive force that drives

civilizations to war and individuals into courtrooms, these “of play” instances don’t usually appear as fun. The play instinct has been absorbed by the serious, the earnest and the explicitly cultural.

On the other hand, when *agôn* is channeled “for play” we see the emergence of sports and competitive games which are intended as amusements, pleasure and for fun. And when fans boo and cheer it seems that *agôn* has turned to at play. This suggests that only when the play urge is directly “for play” or “at play” do we think of it as fun. When something is “of play” and lacks a “for play” and “at play” dimension, it also lacks the pleasure called “fun.”

This fits with the earlier discussion of fun. If fun is the experience of the is/is not, then for and at play activities such as games, retain this critical duality. Something that is from play, such as Huizinga’s observations about the rules of war or the nature of law and the court room, will not exhibit the is/is not. Generals and judges cannot exist in the contingent world of fun. But something that emerges from play yet is for play, like the games Caillois studies, falls within the realm of fun. Games create and subsist on the is/is not.

From this we can see that the distinction is not necessarily a dichotomy. Sports, for instance, may arise as a result of the play instinct, and also deliberately cultivated as play for fun. So rather than imply that the “of play” and “for or at play” constructs create oppositional dualities, more helpfully, we can think of these as analytical tools for assessing whether we are applying Caillois’ rubric to the understanding of something explicitly created for play, or whether we are attempting to understand the motives behind the emergence of activities and artifacts that have emerged from play.

Returning to Caillois four categories, with the additional lens of the “for and at play” and “of play” distinction, we can now apply the concepts to questions about environmental artifacts and activity. The question, “What makes a place fun?” can find grounding in Caillois’ categories:

Agôn: From the urge to compete on an even playing field and demonstrate your superiority comes the “of play” behavior to demonstrate superiority through designing the tallest building, the most radical design or speaking the a concept at the fringe of current understanding. Caillois calls this disposition “ambitious” and it appears as a common occurrence in the environmental design.

But agôn for play has an important place too. The regular geometric shapes of sports fields, courts and pitches along with game boards define a well-known category of play spaces designed for competitive play. Mirroring Caillois notion that contests of agôn must present the appearance of equality among the competitors, this category of space naturally presents highly rational forms, such as the Euclidian dimensions of a football field or basketball court. And even when the play area is irregular, such as the shape of baseball fields with varying distances to their outfield walls, each team competes in turn in this environment, assuring equal opportunity to win on both sides.

So while regular and balanced play spaces, such as a chess board, allow for equal competition, head-to-head, between opponents, there are also play spaces where, like the baseball field, the players also compete against the environment itself.³

³ In the terminology of videogame play, these two different types of adversary are labeled “player versus player”, or PvP and “player versus environment” or PvE.

Obstacle courses, for example, provide an opportunity for a player to compete against the landscape, climbing over and under obstacles, dodging hazards or negotiating elements such as a mud and sand.

Or in the example of baseball, the regular aspects of the field allow a batter to face off against a pitcher. But the outfield wall, a varying obstacle in each ballpark, becomes an additional challenge and the batter attempts to best the challenge existing in the physical design of the space. These competitive environmental features can take on their own meaning and personality, such as the Green Monster at Fenway Park in Boston, an 11.3 meter high wall standing in left field, which challenges batters to hit home runs over its towering lip.

Alea: In games of chance Caillois sees a fatalistic attitude. Like *agôn*, *alea* asserts a standard of equality unknown in life. At the mercy of the roulette wheel, rich and poor, strong and feeble, wise and foolish alike await the outcome of fate. Unlike *agôn*, *alea* requires a submission to a power outside the player—whether that is the random outcome of the roll of the die or a belief in an uncontrollable supernatural other. When we “win” a game of chance, it is not at our own hand, but at the whim of something else—math or god.

This creates an “of play” attitude based in *alea* that favors luck. The giving over to the fates is hard to detect in the design disciplines, as design implies control. But designers of all stripes, including environmental designers, will admit to the luck of circumstance. Whether this giving over to the fates is found in the luck of the shape of a particular site, the luck of landing a particularly desirable client or the luck of a line on a page, carelessly doodled that inspires a design, the presence of the attitude of *alea* is a

present. But this aspect is rarely recognized by those who seek to mold, manage or control the human environment.

Perhaps for related reasons, alea as an attitude “for play” in physical environments is not prevalent.

There are examples though, such as the spatialized chance of the story “The Lady or the Tiger” or in the game show Let’s Make a Deal. In “The Lady or the Tiger”, a young man must choose between two doors—behind one is a man-eating tiger, behind the other a young maiden. And while the story actually hinges on the question of trust—does the man believe that the princess witnessing the event wants him eaten by the tiger or in the arms of another woman—the story also teases at the ultimately reliance on fate. The decision ultimately relates on the luck of the door chosen.

In a much more deliberate manner, Let’s Make A Deal offers each contestant a list of choices without the necessary information to make a rational choice. So, each decision the contestant makes is based on a gut feeling, the cajoling of the audience and, ultimately, luck. This is seen in its most environmental form during the penultimate challenge where each contestant picks one of three doors. After trading in a prize of some known value, the contestant can pick Door #1, Door #2 or Door #3. The possibility of winning a more valuable prize is random, and the host naturally heightens the drama of the decision by giving the contestant many chances to change their mind. But ultimately, each choice is a blind guess, a submission to the fates, dumb luck and pure alea.

To this category we might also add cities that invite a sort of unplanned exploration, a spontaneous *dérive*. The winding alleyways of Tokyo provide a good example of this. The preservation of much of the medieval street network superimposed

with the modern street grid creates spaces where surprise and random discoveries encourage the visitor to take a chance and slip down a winding side street. Exploration roots in the possibility and surprise of alea, the unknown as an opportunity for a lucky discovery.

Mimicry: The category that Caillois uses to capture role playing, imaginative pretend and simulation seems a natural fit with architecture. After all, the façade appears as a cloak or mask over structure, allowing buildings to pretend they were built of stone when the structural construction is wood, or masquerading as a timber lodge, when the structure is steel clad in fiberglass wooden logs. Likewise, visitors to a historic castle, inspired by the setting, imagine themselves lords and ladies, knights and knaves. These opportunities for play, whether in the façade or the mind of the visitor fits with Caillois' notion about the role of mimicry.

“All play presupposes the temporary acceptance, if not of an illusion (indeed this last word means nothing less than beginning a game: *in-lusio*), then at least of a closed, conventional, and, in certain respects, imaginary universe. Play can consist not only of deploying actions or submitting to one's fate in an imaginary milieu, but of becoming an illusory character oneself, and of so behaving.” (19).

In this sense, mimicry appears at the center of the game machine and its ability to create a “temporary acceptance” of an “imaginary universe.” This fits closely with the notion of the game as a system for creating intentional ambiguities, artificial gaps between the real and the illusory. Mimicry in this view is much more than simple masquerading as one thing for another. Further, Caillois' point about the “illusory milieu” provides a clear indication that he does not consider all forms of illusion as forms of mimicry. Rather, only when the players, or perhaps more accurately actors, take on a role

that they know is imaginary can play take place. The alternative might be a kind of madness, where the fake is mistaken for the real and neither a game, nor play, is possible. The tendency to mask, to disguise and to deceive has a clear relationship to play. However, in the play of a game, only the pretense of tricking the viewer is acceptable. “But in games the basic intention is not that of deceiving the spectators.” (21) For mimicry to fit within Caillois’ model, it must also be circumscribed by a limit of an acknowledgement of the charade—by the player but also, potentially of the spectator as well.

Looking through the lenses of “of play” and “for and at play”, this point becomes even more clear.

The façade can occur as a product of play, for play and even at play. But this does not mean that the façade as an architectural device is always related to play. When the masking is done in earnest or meant to deceive, then there is no sense of play. So, surface masks of paint and plaster and aluminum siding designed to look like wood may hide a shame in revealing the true building material. And this sentiment may scale up through massive structures that hope to transcend the mere facts of their construction through deceit or aspiration. This seems to be the case for so many skyscraping structure erected at the advent of the high rise era, as steel structures clad in classical form and stone.

In other cases, the environment is appropriated into a space between the of play and for play construction. For example, stating, “The rock over there will be the goalpost and that mailbox will be the sideline,” is an instance where play itself demands that objects become something else—even if just in concept. Within the game, the rock and the mailbox cease having any other function other than that which what is defined by the

game. So, we could say that the mailbox is asked to mimic the goalpost. But the environment was not originally constructed for play and only becomes a place for play, through this creative appropriation, which might be better described from play.

Of course, this is unsatisfying in terms of fun. Because from play constructions do not, on their own, generate fun. The mailbox as goalpost is simply a re-appropriation in the context of play. When buildings pretend to be something they obviously are not—a duck, a derby or a Roman palace—the at play construction comes into being. The mailbox does not conjure its contradiction the way that a Disney castle does.

When mimicry is truly for play, then it turns into “inconsequential make-believe”. (86) Important here is not that the make-believe points to a central unreality or falsehood. Rather, the idea is that the pretend is understood as such. If being a fairy princess is played in earnest, then all threats to this fair sovereignty, every slight against the royal claim must be considered seriously, possibly destroying the fun in an effort at authenticity. Or, in a more playful case, simply dancing across the lawn with gossamer wings is enough. The fun is in being a fairy and not being something that cannot really exist. Likewise, a casino that plays at being a mythical pyramid or the island of Manhattan, the mimicry at and for play takes flight in delight.

Further, following Caillois’ framing of the notion of mimicry inside the context of games hints at both the necessity of some level of mimicry in play and the ease with which mimicry creates the sense of fun.

This helps create a context for all of the pretend environments that tend to polarize fans and critics. Among this class of places, Disneyland stands as the archetypal example. Structured around mountains that are not mountains and rivers that are not

rivers and patrolled by mice that are not mice and rides that travel to no destination, only in a circle, Disney delights in a calculated mimicry. Like a costume on a player, the attractions at Disneyland inspires an escapism that invites the visitor to pretend that they are a jungle explorer, a dandy strolling up Main Street or an astronaut streaking through the cosmos. While Disney could simply ask its visitors to take on these pretend roles, the material certainty of the architecture provides solid facts to contrast the fantasy against. Mickey may not be a real mouse, but there he is, standing there. You can touch fantasy, making the illusion more powerful. Through the lens of mimicry, we discover how the materiality can anchor even greater flights of fantasy

These facts play out as well in heavily themed children's playgrounds. Monkey bars may challenge a child in the sense of *agôn*, to compete against the environment and have fun. Playgrounds molded into the shape of a pirate ship do something else. While other uses of the playground equipment surely have a presence, given the narrative framework of a pirate schooner, children are likely to command the bridge, bark orders and rehearse swashbuckling moves. The mimicry of the place invites a further mimicry from the people in the place.

Not surprisingly, architecture parlante and Disney's calculated fakery often become examples of narrative architecture. A fairytale castle in the middle of Anaheim, California invites a kind of tale telling that the Disney Company, with its roots as a narrative film studio, has always been ready to provide. Cailliois notes that the theater is the most obvious demonstration of the play of mimicry—another narrative art. In this way, environments that mimic or simulate other places and times, and that serve the

purpose of inviting those in the environment to participate in the play, become examples of this category applied to place.

Ilinx: From the attitude that Cailliois describes as “enfrenziend” and a source of hysteria, we can find a place for environments designed to playfully disorient, frighten and are “based on the pursuit of vertigo and which consist of an attempt to momentarily destroy the stability of perception and inflict a kind of voluptuous panic upon an otherwise lucid mind.” (23)

Roller coasters and all manner of midway rides provide an initial field of examples of spaces created for exactly the purpose Cailliois describes. But to this category we can also include observation decks constructed in skyscrapers and bridges overlooking natural precipices. The Willis Tower in Chicago (formerly the Sears Tower) hosts an exaggerated feature which illustrates this point perfectly. The Ledge is a glass box that juts a little over four feet from the skyscraper’s observation deck at 1,353 feet in the air. Visitors are invited to stand on the glass platform, challenging their sense of security in a designed moment of acrophobic vertigo. (2009)

Staircases that wind up towers to dizzying heights and mazes that turn the participant to and fro with the apparent intent of testing the ability to keep ones bearings are other examples of environmental ilinx. And the traditional fun house, with its room of mirrors, tilting floors, unsure footpaths and the spinning barrel hallway form a perfect case study of ilinx.

The affinity between architecture and ilinx seems natural. Where the base of western architecture remains firmly rooted in rational traditions and a history of supporting cultural norms, ilinx embodies disruption, lack of confidence and tumult. If

fun can be found in the contradiction of the norm and its transgression, then the inherently spatial aspects of ilinx are easy to construct. Any deviations from rectilinear form will likely find itself viewed through a playful interpretation. So, the flowing forms of Frank Geary and the angular disjunctions of Daniel Libeskind may have a basis in serious architectural business. But to the viewer, these buildings ignite a playful spirit.

On this point, the question of “of play” and “for and at play” reach an interesting collision. While Geary’s Disney Concert Hall, may represent the leading edge of architectural theory and design, it still can stimulate a play spirit in those that view it. His designs may stem from play, without an intention of being for play, but his buildings still create a at play sensation in their viewer. The ilinx of place blends the “of”, “for” and “at” senses of architectural play. Through the notion of ilinx we can easily observe the natural tendency of environmental designs inspired by the play instinct and, therefore, result in “of play” places also can easily become places with a strong “for play” or “at play” presence. We may not look at Libeskind’s Denver Art Museum extension as a place for play. The building continues to argue that it is not the thing that it is—the norm reinforced through its transgression only because the transgression of form never subsumes the norm. Then, once serious architectural speculation subsides, viewers can marvel at the canted lines and playful jumble and ponder: I wonder if this building is full of art or playground slides?

Formal and Informal Structures

From this discussion we can see that place can support Caillois’ four attitudes. But it is the inclusion of another other key idea in his work that this system of play analysis becomes most useful to the description, and ultimately the design, of playful

places. For Caillois, there is an intersection of *ludus* and *paidia* with *agôn*, *alea*, mimicry and *ilinx*. He suggests inside the axis of *ludus* and *paidia*, the structured, rule-bound play of one end and the free-form, unregulated play of the other, fit the four categories of play. In this way, Caillois is able to shade each fundamental type into a range of related activities. He can then describe the paidiaic end of *agôn*, for instance, as the spontaneous wrestling and racing contests of children. Ludic *agôn*, however, is the formal presentation of sports, with all their official rules and strict guides for behavior.

This stratification of the attitudes toward play by *ludus* and *paidia* also translates into the subject of environments.

Of course, an immediate issue arises. The notion of environmental design suggests an intentional structuring. To build at meaningful scale is rarely an act of impulse, but rather of consideration, planning and careful execution. So, when considering place for play, fun places, it would seem that the structure of *ludus* would always apply, at least in some degree. In this sense, ludic space is always structured and, to some degree, rule bound. Paidiaic space, then, must take the opposite position, some place wild, unplanned and unregulated.

However, this assumption would merely be a mistake of assuming that places themselves can embody the various attitudes people have toward play. A better way to consider this issue is to look at ludic space as designed space that encourages or otherwise promotes the ludic aspects of play while a paidiaic space should encourage the opposite—free, unfettered, open play. Much as the examples of Carlsbad Caverns and White Sand show, as environments are controlled, they appear in their more ludic aspect, where the release of control at some level appears necessary for the paidiaic spirit to

emerge. And this also points to the easy collaboration that these two aspects of play can have in a space. Ludic boundaries can establish the structure necessary to contain, but not control, the play activity in the same way that a paidiaic freedom is necessary inside the controlled ludic structure. The goal in either case is to create an environment that sustains the play and extends the fun.

In fact, this is the approach that Pearce takes in her examination of massively multiplayer online worlds. Looking to apply the concepts of *ludus* and *paidia* to virtual places she clearly delineates the impulses as they apply to place:

“The primary distinction is that ludic worlds present the player with a prescribed overarching goal and a set of constraints that dictate how those objectives might be met, whereas paidiaic worlds provide players with a range of activities and options for social interaction.” (Pearce 2009, 28)

Where Caillois diminishes the role of *paidia* in favor of the *ludic*, Pearce sees paidiaic spaces more as “sandboxes, in which players engage in open-ended, unstructured, creative play, although they typically allow for more structured play to emerge at the player’s discretion.” (28)

Following this interpretation, we can talk about space designed for goal-oriented versus creative play first, and then look for *agôn*, *alea*, *mimicry* and *ilinx* inside this context.

Descriptive Terms

The strength in Caillois system might encourage an approach to play and games that relies entirely on his system. After all, his goal in looking at games was nothing less than the construction of a sociological understanding of culture through the lens of play and games.

But while Caillois' rubric bears out the some of the categorical similarities and structural differences in the variety of play and games across time and culture, his approach is decidedly short on a more complete critical apparatus for talking about the qualities of specific games. For instance he deftly organizes games of contest into the category of *agôn*. But he does not provide a means for talking in more detail about the cultural attraction of football and chess over other sports and games of *agôn*. Related, without a supporting vocabulary, the design of games would remain random or intuitive activity, undirected with individual designers unable to communicate successful patterns and desired outcomes.

Whether language itself plays a fundamental role in the experience of games, it clearly does play one in the social construction of meaning around games. We need words to talk about games, to share our experiences of games and words to evolve our design of games. So, a specialized vocabulary of game design and game experience has developed, even if in a non-systematic, colloquial manner. This is to say, game players and game makers have invented terms to communicate their ideas and experiences about games.

As a result, and as we have seen, there is a large and growing vocabulary of critical terms used to talk about and to design games. And while this collection of terms is messy, lacking the clarity of thought and organization of Caillois' system, borrowing many of these terms and translating them into a form useful for discussion of environmental analysis and design presents itself as an obvious step toward answering the question, "What makes a place fun?" By broadly defining key terms from the vocabulary

of fun derived in the past chapter, and anchoring them in environmental contexts, the result will outline a method for talking about places in terms of fun.

Considering places as games, which is to say model machines for producing fun, allows us to form answers to the question of, “What makes a place fun?”

What follows is an effort to capture the primary, common terms from the vocabulary of videogame analysis and critique and evaluate them for useful application to questions of environmental fun. This review will further elaborate a method for discussing, describing and analyzing places in terms of their playful potential, their ability to embody fun. The goal is to provide some initial connecting points between the growing body of research in game studies and the world of architectural history, theory and criticism. As such, each term will only provide a sketch of the possible connections, providing a preliminary bridge for future investigations.

Further, this term-by-term exploration also understands a rich connection and interaction of the concepts in practice. But here they examined individually only as a starting point.

Rules

The formal systems that define a game.

Despite the wide diversity of thought around games, about what comprises a game, what games mean and why we play them, there is an essential agreement on one point—rules sit at the center of the game concept.

“Games have rules. This is perhaps the most prominent feature of games, one that distinguishes them from other forms of media, art, and entertainment,” claim Salen and Zimmerman (103). And while this overstates the case somewhat, since we find rules in

everything from the law and the protocols for watching a movie to the practice of art (such as the Oulipo), it does clarify the importance of rules to games. Without rules, whatever else you have, is not a game.

This suggests that if games are machines used to produce fun, that rules are necessary to this effect. Perhaps just as important, rules alone are not enough.

In a key example from “Rules of Play” Salen and Zimmerman suggest that while the rules of the game Go will remain unchanged, the instances of play of different games of Go might vary along the dimensions of material, motivation, outcome as well as space and time (103). In other words, whether Go is played with bamboo leaves and pebbles, played professionally or for fun, whether an individual match is close or a blowout, and whether it is placed in an medieval Chinese palace or on a modern day college campus, the rules are the same, even though we can point out that each instance of the game is different.

So, we can understand rules as a necessary, but not sufficient, to describe a game. While this conceptual agreement around the central role of rules helps clarify the importance of rules to games, a focus on rules does not describe all the different ways rules matter to games, the typical patterns that rules take in games or the various meanings that rules can carry in a game.

This observation is based on the nature of rules themselves. While rules may be central to games, they are not unique to games. Society is filled, and in some senses defined, by its rules—from laws to codes of conduct and including the vernacular of the rule of thumb.

This points to two particular aspects of rules in games. First, that rules play a somewhat different role in games than they do in culture at large. And second, that while rules may frame a game, they require the interplay of other aspects of the game to fulfill their purpose in the generation of fun.

On this first point, Salen and Zimmerman attempt to answer the question, “What is unique about rules in games?” (121) They conclude the following distinction that make game rules unique:

- Rules limit player action.
- Rules are explicit and unambiguous.
- Rules are shared by all players.
- Rules are fixed.
- Rules are binding.
- Rules are repeatable.

And while this list certainly emphasizes the highly formal aspect of game rules, it’s not hard to imagine traffic laws as a system of rules that could easily fit this definition, without any thought as to considering traffic laws a sort of game in any sense related to fun. Still, rules of culture do appear less formal, not as binding or mutually shared by everyone in the culture.

So, while rules in games do appear to have certain characteristics that make them identifiable as such, in order for the game system to reach the goal of fun, there is more to the story. Or, in the case of the current project, there are other terms in need of description. Rules may be necessary, but they are not sufficient when talking about games.

Rules and Environment

The cultural and material systems that define a place.

Game rules exist in different forms. Some game rules are written in software code and executed by a dispassionate computer processor with a sterile sense of fairness in executing the instructions exactly as written. Other rules exist largely in the mind of the player and are enforced entirely through social contract. So, videogames and hide and go seek both operate as games with a similar grounding in rules, even though one is a product of the perfectly fair execution of code and the other a result of humans agreeing to the terms of the game.

Often, the material and social instances of the game overlap, such as in the presence of a net on a tennis court or a basketball hoop. Because on one hand, the players make a social contract to interpret what it means when a ball hits a net or sails through a metal hoop, the material form of the net and hoop also help enforce that rules of the game.

It is in this material/social spectrum that architecture fits. As material form embedding various cultural constructs, it is easy to think about buildings as a base set of rules. Some of those rules are enforced by the brute nature of physics and matter. Stairs must be climbed though exertion of effort, walls hide space and inhibit range of motion. Likewise, cultural norms prohibit most people from climbing through windows or sleeping on floors when doors and beds are provided for those functions.

When attempting to decipher places as machines for generating fun, like a game, the notion of the game rules maps easily to real places. To make this point even more clear, consider Salen and Zimmerman's attempt to reconcile the strict sense of formal rule systems with the joy and freedom found in games:

“If you think all of this talk about fixed and authoritative rules makes games seem a bit constraining, you are right. Out of all of the possible forms of play, from casual Frisbee-tossing to playful lovemaking, there is something slightly stuffy about games. A completely open-ended game, where rules are constantly invented...is probably not a game by our definitions. Although game play can be freewheeling and highly spontaneous, there are other forms of play more improvisational than the play typically found in games. But there is a special kind of lucidity and intelligibility about games. ‘Real life’ is full of ambiguities and partially known information, but that is one of the reasons why games as designed systems are artificial and distinct from daily existence. In ordinary life it is rare to inhabit a context with such a high degree of artificial clarity.” (123)

In this view, the rigid structure of the game system provides for a specific kind of abstraction from real life. And it seems worth noting that most any building can provide this sort of milieu for game play. This fact, on its own, helps explain the broad variety of play places, from designed theme parks, to repurposed prisons, to disco clubs in retired churches and the ever blossoming variety of fun homes built on the bones of the American house.

Likewise, this perspective on rules also calls into question Constant’s New Babylon and Cedric Price’s Fun Palace. Would constantly changing spaces generate fun? Or would these improvised spaces simply turn culture into a free-for-all—one of Allan Kaprow’s Happenings on societal scale?

Salen and Zimmerman’s insight into the nature of game rules also points to something else about their application in architectural space. Rather than speak to certain material or cultural truths—Smith’s model machine—the fun place must create a “designed systems” that is “artificial and distinct from daily existence.” In other words, as the folly traditional shows, a fun place transgresses a rational tradition in architecture. The rules of the game, it seems, must adhere to the same is/is not contradiction that the

game itself does. The rules are meaningful meaningless, constraining action to promote freedom.

In this context, the surprisingly variety of the “upside down” buildings⁴, structures designed and constructed to appear upside down, and in some case built entirely upside down, makes sense as something artificial and distinct from daily existence. These structures need little else other than a formal rejection (a transgression) of the culturally accepted form (the contradicted but unconsumed norm) in the extreme to excite the imagination, free the playful spirit and generate a sense of fun.

Narrative

Telling stories with games.

The presence of narrative in games creates complications from the start. While games present an interactive, variable experience that necessarily can conclude in many different states, a story appears as a static thing, winding toward a specific conclusion. Not surprisingly, the question of narrative in games has generated much discussion and debate. And nowhere has the tension between narrative and games been as obvious or theoretically challenging as in the so-called “ludology versus narratology debate.” (Juul 2005, 15-16). Originally an attempt by some of the scholars of the nascent videogame studies research community to cleave games from the methodological grasp of literary studies, the debate eventually blossomed into a more vigorous consideration of the nature of games. Do we play games to reenact stories in a way that is still very much a literary tale-telling? (Atkins 2003). Or are games something else? Was there a new form of

⁴ For a variety of examples, see:

<http://www.google.com/images?q=upside+down+house&biw=1280&bih=675>

meaning-making buried in all those rules? (Bogost 2007). The problem with the narratology versus ludology characterization was that neither side of the discussion really disagreed on a meaningful level; each approach was largely one of focus and emphasis.

Not surprising, a meta-debate sprang up on the subject as sides gathered as to whether or not the original debate was worth the effort. Perhaps most telling, one of the progenitors of the “ludology versus narratology” dichotomy suggested that the conflict never occurred, or at least that it was not a meaningful distinction since games and stories were not at odds. (Frasca 2003)

Perhaps more helpfully, Pearce raised the question about games and narrative that “The more interesting question is not ‘Are they/are they not narrative?’ but ‘In what ways are they narrative?’” (Pearce 2005, 1). She suggests to look at “narrative operators” and to talk about how story supports gameplay.

This is a similar approach that Juul uses to characterize a complex relationship between games and narrative. Juul starts with a notion of games as “half-real” artifacts. He sees them as combinations of both real and fictional elements.

“(V)ideogames are *real* in that they consist of real rules with which players actually interact, and in that winning or losing a game is a real event. However, when winning a game by slaying a dragon, the dragon is not a real dragon but a fictional one.” (Juul 2005, 1)

This observation sets up a more detailed discussion of the relationship between narrative and game. Looking for an appropriate context for talking about the role of narrative in game, and one that appears as inevitable once Juul admits that games are fundamentally a form of fiction, he describes six different senses of narrative, and finds some levels of narrative apply to games and some do not. (2005, 157-159)

The specific definitions of narrative that apply to games appear less important than the bigger argument that narrative does not simply map onto games, nor does narrative sit outside the realm of the game. In this sense, the “half-real” concept provides an anchor for asking other questions about games. What are the real components of games not involved in fiction and how do they work? How do players experience these half-real constructions? What can we say about the expressive nature of games as half-real artifacts? Juul uses most of his book to provide a structural survey of games and provides answers to these questions.

Key in his approach, however, is the necessary presence of rules in a game that set up a natural hierarchy, in that the rules always come before the narrative . As he points out, “Though rules can function independent of fiction, fiction depends on rules.” (121)

Helpful in applying Juul’s approach to the current project are three things:

His argument helps clearly separate narrative from games as a critical object—something that can be examined both in the context of a game, or as a unique element. The conceptual approach to games as half-real artifacts also provides a nuanced method for integrating the subject of narrative back into games.

However, a game’s fiction, and thereby its narrative, depend on, or perhaps more appropriately, are anchored in the rules of game.

These features help define the half-real structure games and the role of narrative in the production of fun, “...*Half-Real* refers to the fact that videogames are two different things at the same time....” (1). Games are both fiction and real, story and game. In this way, he directly maps the notion of game and narrative onto the is/is not ambiguity

previously discussed as the nature of fun. Whether narrative is seen as a necessary component of the game machine, its successful presence in a game depends on an ability to fictionalize the reality of the game (and one would assume, to create a sense of reality out of the obvious fictions of the game system). Narrative creates an imaginary space for the real (in Juul's usage) rules of a game to work inside of.

Narrative and place

Telling stories with place.

The idea that place can carry a narrative fits within the broader conception of architecture and landscape as cultural objects. So, suggesting narrative as a critical point in the analysis of games finds a sympathetic echo in the idea of analyzing something like buildings in terms of their narrative possibility.

But the notion of narrative in games does not quite match the same idea in architectural theory. While finding the potential for narrative in architectural design, speculation and built form, thinkers such as Sophia Psarra cannot completely commit to the notion of buildings as stories in a more traditional form. As she writes in "Architecture and Narrative": "Architecture is not a story or a sequence of events, but this book sees the conceptual properties, perceptual experience and the organization of the cultural message as its potential instruments for narration." (2009, 4). In other words, Psarra sees narrative codes at work, but not the full fictional force of story, not narrative in the sense that games can absorb narrative.

Psarra's argument helps illustrate the limitations of the current use of the term narrative in architectural discourse. When architectural designers talk of narrative, they very well may mean something different than when a game designer does so. To talk

about narrative in the context of a place that generates fun the term must expand to include both the architectural as well as game contexts.

Pearce makes this point clear in her description of the concept of “narrative environments.” (1997) These environments are both the virtual, such as games, as well as the physical spaces that somehow tell or allow us to experience story. She notes that Disneyland’s success as a commercial narrative environment acts as a model for many of the narrative environments built since. Disneyland’s genesis in the hybridizing of cinematic storytelling and fantastic architecture put together some of the most important models of how a place could tell a story, in the traditional sense of the term. In this way, Pearce sees narrative environments in a place much closer to Juul’s conception of the ‘half-real’ game than in Psarra’s narratively coded architectural spaces.

Pearce pulls three archetypical story-carrying examples from the Disney parks: The Pirates of the Caribbean ride surrounds the viewer with constantly changing, active scenes that riders experiences in a head-turning act of tourism through a cinematically structured tale.

The Swiss Family Treehouse (now Tarzan’s Treehouse), tells a story in structural vignettes as visitors walk through a giant tree and piece together a story of survival and family ties in an almost archeological fashion.

The Snow White ride takes viewers from one story scene to another, like reading pages in a book. Most interesting, she sees the techniques of Snow White’s commercial entertainment having roots in the Catholic Church’s medieval stained glass windows, preaching a visual gospel to an illiterate congregation.

In each of these narrative environments, environmental designers have constructed stories, borrowing techniques from theater and film in many cases, to create architectural tales told in brick and mortar, plaster and paint revealed in sequence through motion.

Finally, the narratology versus ludology debate appears to have special relevance in terms of environment. Taken as two perspectives about how meaning in games occurs, the ludological side argues that games generate meaning in the interaction with their procedural systems, and narrative should simply support this meaning making. The narratological side sees story as a primary form of cultural meaning-making, and the rules of the game supporting the pillars of storytelling.

In terms of a place, this dichotomy can be seen in the categories of places focused on what you do and places focused on the stories they tell. This suggests both a real tension between interactive game systems built of rules and narratives that invite the participant to play a role in an unfolding story. Looking at playgrounds as an example, we see the success of “loose parts” playgrounds, where children are invited to cobble together their own creations within the limits set by the availability of lumber, nails and tools, and heavily themed playgrounds which immediately suggest kids take on the role such as a pirate, knight or jungle explorer. In one instance, the playground seems better suited to the ludological end of the spectrum, in the other, a clearly narratological force is at work. Not surprisingly, playground scholar Susan Solomon, without invoking these terms or concepts, does come up with a criticism of modern playground that fits. To her, playgrounds have become safety obsessed, and leave little room for children to do much interesting. And certainly, the pre-fab plastic playground sets neither do a good job of

infusing any sort of strong narrative into their structures nor allow much freedom of action. (Solomon 2005)

Of course, pitting narratological and ludological environmental designs against one another risks running into the debate similar to the one exhausted in game studies. So, while children in a ludic playground might easily invent stories, and children in the heavily themed playground spin tales unrelated to the theme, the notion that some designs more easily lend themselves to story, storytelling and narrative is clear.

Player

The person, or people, who play a game.

When Shakespeare wrote in his play, “As You Like It”, “All the world's a stage, And all the men and women merely players: They have their exits and their entrances; And one man in his time plays many parts....” he unknowingly anticipated the problem of the game player in game studies.

To paraphrase slightly, if everything is a game and everyone is a player, this would suggest two very unnecessary terms, “game” and “player”.

But surely Shakespeare’s prose was meant as an ironic metaphor uttered in front of a theatrical audience. His point must have resolved around an argument about the value of the theater to embody the entire spectrum of human experience. And, so with games, the idea that everyone is a player at all times chafes against common understanding and theoretical positioning alike.

As Huizinga argued, and has been echoed ever since, play must be set outside of ordinary life. And whether or not this set outside-ness is truly a “magic circle” as Salen and Zimmerman have argued, the role of the player is linked intimately to these extra-

normal moments that we identify as play and allow us to take on the guise of the player.

The relationship between play and the player is most evident when you consider those who work against the game system—the cheat and the spoil-sport. As Huizinga makes clear:

“The player who trespasses against the rules or ignores them is a ‘spoil-sport’. The spoil-sport is not the same as the false player, the cheat; for the latter pretends to be playing the game and, on the face of it, still acknowledges the magic circle. It is curious to note how much more lenient society is to the cheat than to the spoil-sport. This is because the spoil-sport shatters the play-world itself. By withdrawing from the game he reveals the relativity and fragility of the play-world in which he had temporarily shut himself with others.” (11)

This suggests that we are not always players, but that we play under special circumstances and these circumstances define our role as a player as much as our role as a player defines the play. And when play is associated with the concept of fun, then the act of play reserves a very specific attitude toward the activity of playing that creates or maintains the fundamental is/is not nature of fun.

So what is a player? Ironically, the concept is so deeply infused into the conceptualization of play that it is often overlooked.

To understand this visible/invisible conundrum of the player, David Myers’ work on theorizing the minimalist game is helpful. In summary, Myer asked the question as to what were the essential or fundamental things that we would, at minimum, consider a computer game? (Myers 2009)

Curiously, and significantly, he excludes players from his minimalist definition, while necessarily admitting them. He argues, “(W)e are forced to eliminate all reference to players and playing...” from the minimalist definition of a game. (3) And while this

seems to diminish the role of the player as a part of the essential or fundamental aspects of a game, his further arguments seem to weaken this point.

For example, when discussing one of the core, minimal elements of a videogame, Myer writes: “In order for players to experience this peculiar aesthetic, the game form necessarily must place the player – all players – in an oppositional relationship with the game and its rules.” (5)

In other words, even in Myer’s attempt to derive a minimal set of things that would describe a videogame, and in spite of his desire to exclude the player from that definition, the player does not appear to be an element easily removed from the game.

There is a caveat to this observation, and that relates to the difference between a game as an artifact and a game as an activity. As an object, one can refer to “games on the shelf at the store” without reference to a player. But these mere artifacts really only have meaning in relation to the second sense, games as an activity. And games as played always need a player—even if that player is an artificially intelligent agent.

As a related, but alternative, view on the player as the agent in game play, and by proxy, as a necessary aspect of the game, we have James Neman’s equivocation of the player with the notion of an audience (2004). But even as he notes, the concept of “audience”, despite its messy connotations, is still deeply embedded in the notion of the game.

“(T)he ‘audience’ is a slippery entity that is variously considered as a group of market researched users, a group to be targeted and sold products, and a group not defined through empirical research but rather ‘read’ or ‘implied’ from the text of the videogame.” (49)

His point here could be easily overlooked, but it is key. While the player may be central to the overall definition of the notion of game, it appears, in Newman’s

perspective, that the player is a product of culture (the market) and of the game itself, or as he says “the text of the videogame”. This suggests the situation of the game inside the larger cultural milieu, and the manner by which the game shapes the nature of the player participating in the game remain primary over any a priori notion of the player prior to the encounter of the game. This point of view helps side-step cultural relativist notions of why we play or enjoy games, and suggest some sort of primary ability of games to create an experience regardless of the player orientation before they encounter the game.

In a simple sense, we could say that the game provides a role which a person adopts, becoming a player of the game. As a result, the player is both primary to the notion of the game, but also a pure product of the game.

Player and Place

The person, or people, who play in a place.

The relationship between the player and game appears to mirror closely the relationship between people and architectural space. Both depend on a designed system that stands without any sort of outside participation. The game and the building can exist as artifacts, material facts without any function, interpretation or use. However, neither category makes sense without some sense of human participation. Conceptually, games and buildings cannot complete their meanings without a sense of function, even if that function in particular goes unrealized. Thus a human structure abandoned to the overgrowth of a jungle or a game un-played on a closet shelf does not revoke the notions of use, function or human participation in general. Rather, in this case they only refer to a specific instance of disuse that does not otherwise tell us much about either games or buildings. Eventually, both return to the idea of some sort of human use. And in the case

of games, the user is a player. In terms of architecture, the user is a client, a viewer, a tourist, an inhabitant, a resident, the public, and more. And despite the terminological diversity of the architectural user, the concept matches, closely, the role of player in terms of an agent that both defines and supports the meaning of the mere artifact.

Without suggesting at this point a further symmetry between a building and a game on other grounds, the parallel on the subject of player/user allows for a simple method to borrow game concepts about players and use them to talk about architectural users.

Where the difference between a player and the user of a building hinges on the notion of a player as engaged in something. To further clarify this convenient convergence of terms, it helps to recall that the goal of this critical method is not to interpret all possible forms of human environment, rather, to create a framework for talking about environments and fun. Because of this, the single term "player" seems ideally suited to talk about people interacting with human artifacts designed to produce fun, whether a game or a home.

This frees the term "player" from the exclusive context of the game and allows a player to play a game, play at work, play a sport or, specific to the current project, play a place.

But play in a place, in terms of the play as "distinct from 'ordinary' life" (9) in Huizinga, raises certain questions of spatiality in terms of the player. Certainly, no real place can actually exist outside of its material form. But a building as material stands mute without culture to inhabit it and give it meaning. To say that a church means something is to say something specific about its use and its culture presence. Turning a

church into a nightclub or a bed and breakfast may not alter its physical form, but it does set the structure outside of its original context. The key here is that the use, the actions and the activities of the people in relationship to the building, create the distinction from the ordinary. The player in the place denotes the extraordinary.

Of course, this is not sufficient because people understand systems of signs in their architectural constructions. We enter a nightclub that was once a church recognizing the signs that speak “church.” Our act of transgression by participating in a new program on the blueprint of the original structure forms the key delight. It is fun to dance in a cathedral because the space no longer operates as a place of worship, but still signs that it is a church.

Repurposed architecture, then, becomes a simple, but primary way, to re-present a building program as something new, and offer people a novel use that can now easily be described as putting people into the role of the player.

The same process is at work in an amusement park or residential street when something unusual appears—whether that is a princess castle sprouting from the urban sprawl of Southern California or a house decorated in grisly fashion for Halloween. The difference of program can also expand into the difference of spatial organization, geographical location or any other jarring disjunction of taste, material or sign.

In each case, these differences must cue the viewer or the participant as to their role. And in so many cases, that role is nothing more than a tourist.

Dean MacCannell offers two notions of “the tourist” which help expand the idea. He refers to the tourist as “sightseers, mainly middle-class, who are at this moment deployed throughout the entire world in search of experience.” At the same time, he

points out, the tourist “is one of the best models available for modern-man-in-general.”

(1999, 1) In both cases, the tourist is someone is someone who goes looking:

“Modern man has been condemned to look elsewhere, everywhere, for his authenticity, to see if he can catch a glimpse of it reflected in the simplicity, poverty, chastity or purity of others.” (47)

While MacCannell’s tourist is doomed to seek and never find, the ludic tourist is not in search of the authentic, but rather a certain kind of contradiction of the authentic.

In this way, the player contradicts the role of the tourist and finds fun in the process.

Important in MacCannell’s sense is the tourist explores, casting what John Urry calls “the tourist gaze”, in a search for the authentic. And, as such, this experience is always the experience of cultural production as a viewer, rather than as a producer. MacCannell theoretically binds to the tourist to the site via markers (everything from guidebooks to postcards that signal the presence of a site). That is to say, the tourist creates views that reinforce the distance between the person and the authentic experience being pursued.

Urry extends this notion by including the notion of pleasure in this discussion of the tourist.

“Places are chosen to be gazed upon because there is anticipation, especially through daydreaming and fantasy, of intense pleasures, either on a different scale or involving different senses from those customarily encountered.” (Urry 2002, 3) Still, this notion of the tourists leaves them looking rather than participating, or playing.

As a result, traditional theories of play might balk at the idea of the tourist as a person at play. Games as an action medium, to use Alex Galloway’s term, suggests that the player must labor in some form or another to create the magic of play. But as Myers’

insight subtly suggests—while you may not be able to remove the player from the gamey you just don't need the player at the center to find the game. So, in the context of the current discussion, a place can define the player, and the player can be as passive as the theoretical tourist, without losing their role as a player. In this sense, the tourist is an active participant in the “site”, even though their role is circumscribed by a set of rules that demands inaction. And this relationship is defined, at least in part, by the player's pursuit of pleasure and or authentic experience.

In terms of architecture, we rehabilitate the image of the tourist as a player, without placing them at the center of the architectural concern. Architecture can still define the player. Meanwhile, the player can continue to wander, producing only a viewing eye. But this in no way prevents them from, in their role as a player, from eventually finding fun.

Entities

“Entities are objects within the game that the player manages, modifies or interacts with at some level.” (Julian Alvarez 2006, 5)

Every game has objects that help define it. These things can be player tokens and avatars, equipment and cards, dice and online maps. What defines all entities is that they are parts that either the player, the game or the game system, can manipulate or otherwise work to define the game. As such, entities provide the material stuff of the game.

Perhaps more important, entities have meaning in terms of how they are used. “Entities tend to be defined implicitly by entity manipulations,” (Zagal et al. 2005, 8) Casting light on this difference, game designer Chris Crawford has made a helpful distinction in game design between nouns and verbs. (2003, 2005) In short, Crawford

argues that verbs are what a player can do in a game and the nouns are the things that the players act upon or with. So, the verb “shoot” defines a game at a core level—whether shooting tigers, targets or terrorists—while the nouns provide attachment points for the game’s verbs.

In this model, “entities” are the nouns. And Crawford helpfully points to the dependency of entities on their actions, or verbs.

This notion of entities fits with the notion of games as an action medium, and tends to diminish the importance of entities in and of themselves. As Crawford might say, substitute the verbs “shoot” and “run” with “kiss” and “tell” and without modifying the game entities, you end up with a very different, and potentially interesting, game. The opposite is not necessarily true, since shooting targets shaped like humans is not a dramatically different game than shooting targets that look like spaceships.

Of course, this analysis can slide too far inside the proceduralist camp—assuming that games are best understood as systems, and the content processed by that system is less significant. Because even when a game focuses on a verb such as “shoot” the content of the nouns matter. Within the context of the game, it does matter whether you shoot robbers, clowns or children. In this way, the entities matter. Further, the nature of the entities tends to define the narrative aspects of the game system.

Finally, as the analysis of interface will show, entities are made most meaningful when considered a part of a game’s interface.

Entities and Place

The objects in a place that someone can manage modify or interact with in some meaningful way.

Entities, on their own, do not suggest a specific kind of action, but rather afford a range of action ultimately defined by the game system. A button on a wall may open a door, call an elevator or turn on lights. The entity of the button on a wall remains ambiguous outside of a context. Looking at entities on their own, divorced from their actions, limits their use in analysis.

Still, the presence of entities themselves is a hallmark of games. With things to manipulate, there is anchor for action. And in terms of places, the mere presence of entities upon which someone can take action upon matters.

Where some confusion is bound to arise is in the definition of action. Walls in any building constrain motion in the same way that the floor and space between the walls affords a variety of action—running, walking, crawling or even laying down. In this sense, the physical material of any structure is comprised of entities. This seems insufficient to clarify neither what class of entities might be most appropriate to a fun place nor which entities work to discourage possible actions.

A result of this natural ambiguity of entities—the stuff of games or the stuff of place—point out that the notion is best set aside as a category on its own. Entity actions, then, become the primary focus of analysis. Not surprisingly, the Game Ontology Project ultimately discarded the entire category of “entity” from its system by collapsing the category “entity” into the super category of “entity manipulation.” (2006)

The term “entity”, however remains useful in indentifying the things in an environment upon which the player can act. The specific interaction model and affordances of the entity, however, require additional discussion.

Mechanics

Player or game actions, defined by the rules, possible in the game.

The term “game mechanics” has become a popular term either generally encapsulating the idea of what a player does in a game or as identifiable sets of player-game interactions common in different types of games. So, for instance, “rolling the dice” might be considered a typical game mechanic in board games. And, as such, game mechanics often means something similar to game design patterns. Collections of common mechanics often give rise to game genres, such as how the mechanics running, jumping and shooting form the “first person shooter” genre.

So, where rules provide the structure of the game, the mechanics more closely align to the actual things a player does in the game. Unfortunately, this division is not shared across all definitions of the term. The looseness of the term has prompted some to discourage the use of the word. (Thomas, Orland, and Steinberg 2007, 43) In different contexts, the concept of mechanics overlaps with other terms such as rules, game patterns, interaction and more specialized concepts such as the Game Ontology project’s “entity manipulation”.

A look at some of these specialized terms and their relationship back to the primary term “mechanic” demonstrates some conceptual fidelity between definitions when looked at side by side. This comparison also makes clear why the notion of mechanics is a helpful addition to terms such as rules with regards to providing a more complete ability to describe games, even as “interaction” and “entity manipulation” are absorbed into the class of mechanics.

So, for example, the Game Ontology Project describes entity manipulation as consisting of “altering the attributes or abilities of game world entities.” (Zagal et al.

2005, 8) They go on to clarify, “Abilities are the ‘verbs’ of entities, that is, the actions that entities are able to perform.” And, “Attributes are the ‘adjectives’ of entities, and are altered by abilities.” (8) This definition suggests that rules structure the possibility space, but entity manipulation describes the actual action players can take inside that space. In this way, we might consider that there is no rule in Monopoly forbidding players from doing all deals in Pig Latin, placing their game tokens upside down on the board or from playing in the nude. But from the standpoint of game mechanics, these are not actually features of the game. Rules allow and permit a range of actions that mechanics bring into focus as meaningful features of the game.

Compare this notion with the Mechanics, Dynamics and Aesthetics (MDA) framework proposed by Hunicke, LeBlanc and Zubin: “Mechanics describes the particular components of the game, at the level of data representation and algorithms.” They couple this definition with one of dynamics: “Dynamics describes the run-time behavior of the mechanics acting on player inputs and each other’s outputs over time.” In this descriptive system, mechanics are more closely aligned with the previous notion of rules and with entities, while dynamics captures the notion of entity manipulation as what the player and game the game do when the games is in play. (Hunicke, LeBlanc, and Zubin, 2)

Rather than contradict the Game Ontology approach, MDA simply shifts terms slightly. In the MDA framework, rules fit in with game mechanics and entity manipulation shows up in the dynamics. But the notion that mechanics are what players can do in the game remains intact.

Another approach suggests that mechanics might be best understood in terms of interaction. Looking at mechanics and interaction as two views of the same idea—the player’s encounter with a rule system in motion—helps further clarify the term.

And what of the notion of interaction? As dynamics describes, interaction is best seen as a general term for what a player does in a game, and how the game reacts. For example, the player rolls a die, and the game system reacts by allowing the player to move their piece that many spaces forward. Thomas has summed the notion of interaction as communication loop consisting of a sender of a message, a receiver, and some sort of feedback. (2003) Crawford peruses a similar line calling interaction a “conversation” (2003, 76) and helpfully defining the term as, “a cyclic process in which two actors alternatively listen, think, and speak.” (2002, 5)

Crawford extends his notion of interaction to describe a specific stance around the notion of game interaction, suggesting a dichotomy he calls “process intensity versus data intensity” (2003, 90) Crawford points to a division in computer programming between algorithms, the rules that make decisions and the data, chunks of information consumed and transformed by the procedural rules, to make a point about games. In his view, interactivity is the primary feature of games. Without interesting interactivity, games fail on their most unique characteristic. In this line of thinking, what \ players do, or can do, is more important than the objects upon which they act.

This notion of process and data, or verbs and nouns, has long roots in the game studies world as the source of the “narratology versus ludology” debate, and has more current life in the birth of the proceduralist school of game design and aesthetics. In both cases, the issue at hand is whether to think of games as more traditional narrative works

simply presented in a contemporary media—computers and videogames—or whether to set games aside as a new media type, best studied for their interactive features. Related, the Game Ontology project’s notion of mechanics as “verbs” owes a debt to Crawford’s work and helps thread the notions of mechanics and interactivity along a theme of action over object.

Mechanics and place

What people can do in a place, defined by rules (material laws and cultural conventions).

Two key concepts from the notions of mechanics in games hold particular relevance to the analysis of environment. First, the idea of mechanics as identifiable and repeatable patterns of game play that game designers can invoke when creating games, and second, Crawford’s verb/noun analysis of mechanics and his emphasis on the depth of the game system’s procedure provide a platform for thinking about place.

In both cases, if designers of games can depend on familiar game interaction behaviors when designing games and they can expect to improve the quality of those games through a focus on the procedural depth of the game, then the designer of fun environments can rely on a similar set of tools.

Looking at Crawford’s verb and noun structure and following it into an analysis of fun places, we come to the immediate conclusion that the more designed verbs in a place, the greater the procedural or interactive depth of the place and the greater the opportunity for fun . This analysis describes the focus on verbs in the marketing of leisure environments (shop, eat, relax, gamble, dance, swim, ride, etc). It also describes the case of the loose parts playground, previously discussed. But it might also work well in a context where it seems like an odd fit. Looking at ski resort, it would seem that the only

verb available is “ski”, and the popularity of ski resorts seems focused on expanding the park terrain, or the noun space. But on closer examination, we can argue that the expansion of terrain is actually related to increasing the verb space. New parts of the park allow for different types of skiing and different types of skiers. Resorts might market more backcountry skiing for experts alongside new beginner terrain for those just learning the sport. The adding of tubing hills and terrain parks look to expand the verb space to include “tubing” and “doing tricks”.

This illustrates the feasibility of applying Crawford’s noun verb structure to environment, and suggests the possibility of looking at places in terms of data or process intensiveness, the ratio of manipulatable entities to the variety of available manipulations in the environment

Mechanics as game design patterns suggests that a deeper analysis of individual patterns can reveal useful design blueprints for the creation of fun environments. If game design patterns are collections of game mechanics that have worked in the past to deliver a successful game experience—e.g., one that is fun—then the assumption here is that similar patterns of interaction could translate into new, successfully functioning games or even fun places. This assumption seems less provocative when you consider the versatility of game design patterns to apply to both digital and non-digital games. For instance, the pattern “luck” works as well in a videogame that randomly generates monsters as it does in the roll of the dice to move around the Monopoly board. Exporting game design patterns for the analysis and design of fun places remains a tantalizing, even if only preliminarily explored, opportunity.

Looking at examples from Björk and Holopainen's "Patterns in Game Design" helps illustrate how game patterns, or mechanics, can apply outside of strict gaming contexts, and demonstrate how game patterns can be used to talk about human environments.

Common in videogames is the notion of a level. The game patterns research describes the level as "part of the game in which all player actions take place until a certain goal has been reached or an end condition has been fulfilled." (60) So, a player might have to fight a specific monster on level in order to advance and retrieve a key on another, ultimately reaching a third level where the key unlocks a special treasure. Distinguishing one level from another becomes an essential design characteristic. And Björk and Holopainen suggest that what sets one level apart from another may occur in "content, aesthetics, or a combination of both." So, for example they talk about the use of theming to distinguish levels, such as "from forest to cave or from railway station to factory." (61)

Levels have such a ubiquitous presence in games that players often refer to favorites from specific games and use the concept very much the way someone talking about a book might discuss chapters or a cinephile would point to favorite movie scenes. Interesting here is the point that theming of individual, discrete aspects of a game, organized around specific goals, remains a successful pattern or mechanic. This suggests that strong theming, whether a narrative setting—such as a castle versus a spaceship or a forest versus a desert—or something more visually abstract—such as a blue level versus a green level or a level with one enemy versus another with 20—provides a tested platform for producing fun. Levels in and of themselves may not make a game enjoyable,

but their widespread use suggests some natural connection between clearly delineated goals and the spaces in which you pursue those goals.

Following the “Patterns in Game Design” advice, the disjunction of theme from one space to the other must contribute to the necessary ambiguity we seek in play. And this ambiguity, in this case a coherent disjunction, does appear in fun places. In Disneyland and Las Vegas, where African jungles abut the American frontier and New York City sits across the street from Paris, we can easily see the design pattern of the level at work.

This brief analysis only suggests some of the potentials for analyzing lived, physical space through the game pattern or mechanic of the level, and points to the promise of further research. Of course, this example naturally maps the spatial qualities of the level to real places. So another example, less spatial in nature can help illustrate the flexibility of the approach of applying game design patterns to real places.

For instance, it is not immediately obvious how the game mechanic, the enemy, fits into any sort of environmental analysis. But if game mechanics form a fundamental piece of the game as a machine for generating fun, then we might find some use for the notion of the enemy as we look to translate the vocabulary of games into a more general vocabulary of fun that has relevance to places. After all, enemies are a nearly ubiquitous mechanic in games. So, we should assume that they might have some general use in an architectural system focused on fun.

Björk and Holopainen define enemies as “... Avatars and Units that hinder the players trying to complete the goals.” (2005, 70) While most games have an opponent, the notion of enemies derives from videogames and a common features where the

opponent is computer controlled. Not only has this resulted in computer-controlled players filling the role of a missing human player, but has led to games structured around enemies that players overcome as the primary focus of the game. Consider the first-person shooter genre. Players enter this type of game expecting to fight through hundreds, if not thousands, of enemies who work for some ultimate villain in the game. As the game pattern suggests, “These *Enemies* can actively resist players’ intentions through actions or they can be an explanation for challenges or obstacles in the *Game World*.”

The notion of enemies is so prevalent in videogames that Björk and Holopainen point out that outside the puzzle game genre, most games use the notion of an enemy. In turn, this suggests that the opponent or the enemy is an easy way to generate the ambiguity of game play fun.

Can the mechanics of the enemy find a useful way into the design of fun places? Translated to a spatial context, the notion of enemies at first seems less than useful. Other than populating places with opponents or theatrically performing enemy actions, the idea that a physical space could provide an antagonistic opponent seems a stretch.

But when we recall that the game pattern for enemies can include both agents that resist the player’s intentions as well as providing an explanation for “challenges and obstacles in *Game World*,” opportunities for spatial design become clear. Erecting spatial challenges or obstacles remains familiar ground for any playground designer. Hills to climb, ropes for swinging over simulated chasms and scaffolding of ladders and monkey bars to reach higher levels of a well-designed play ground understand the amusing role of the obstacle.

The game notion of the enemy brings this relationship between the participant and a piece of architecture as a player and a game into more clear light. Physical obstacles alone are not enough to create a fun place. The person enjoying an architectural obstacle must feel that that obstacle is either an enemy obstructing them from their goal or at least a proxy for that enemy. In this way, it is no wonder that children place imaginary monsters at the top of a climbing structure on the playground. The difficulty of navigating the climbing apparatus becomes a joyous challenge when the climber imagines that the metal bars they scrambled up were placed to impede their ascent to face the final monster at the top.

The game design point proposed by Björk and Holopainen states, “The primary design choice when defining *Enemies* is how players can *Overcome* or *Evade* them.” In other words, a physical obstacle needs to obstruct a goal and that obstruction should fit into the context of some sort of enemy—narrative or otherwise. Enemies, seen in the context of “challenging goal obstruction” puts this particular mechanic into a more generally applicable frame.

Levels and enemies are only two possible examples of the hundreds of documented game mechanics. What these examples show is both the relevance of the notion of game mechanics to fun places, and also provides an opportunity to use specific game mechanics to discuss various environmental features. Game mechanics, then, become a productive bridgework between games and play of all types, a possibly unexpectedly useful method for studying play and games—or the system of fun—of all types.

Space

The place where the game takes place.

Games takes place in some place. Unfortunately, suggesting that games are a spatial practice risks slipping into a tautology. As Trevor Paglen points out in his exploration of U.S. government efforts to keep different large scale government activities secret in his book “Blank Spots on the Map”:

“Geography tells us that it’s impossible to take something that exists and make it nonexistent at the same time. ‘Geography,’ my friend and colleague Allan Pred used to say before he passed away, is ‘an inescapable existential reality’. Everybody has a body, nobody can escape from their body, and consequently all human activity—every form of individual and collective practice—is a situated practice and thereby geographical.” (Paglen 2009, 16-17)

Paglen’s point is aimed at the futility of keeping activities completely secret in a democracy rather than as an attempt to universalize the study of geography. But the assertion points to the difficulty in discussing space and games. Games take place in a place. That space may be formally defined as a tennis court or as ambiguous as the imagination of the participant. But whether chess played on a board or word games played out verbally on summer car trip, the game has to take place somewhere.

An influential argument made by Espen Aarseth regarding games and fiction, lays out a similar point when he concludes that “The defining element in computer games is spatiality. Computer games are essentially concerned with spatial representation and negotiation....”(Aarseth 2000, 153).

Aarseth’s reduction is problematic on a number of points, however. The largest issue being the unintentional conflagration of game studies with geography. Because, after all, if games are primarily spatial, then their area of study would naturally fall to geography. Beyond that, the suggestion that a primary game typology is where they take

places seems to willfully ignore how some game types subordinate their spatial concerns to other areas of focus, as you would find in a word game like Twenty Questions.

Of course, in many games, spatiality is key. Think of the topology of a golf course, or the size of a card table. The game space not only frames the game, but also establishes formal properties of the game with as much force as the actual rules—a tree blocks a perfectly legal shot on the green, a small table can only seat a limited number of poker players, etc.

So, Aarseth's point is not without merit, nor even lacking precedent. Historically, games have been defined by the play space—the court, the pitch, the field, the mat, the board or the tabletop. This spatialization of games shows up in Huizinga's claim that play stands "quite consciously outside 'ordinary' life." (1955, 13). In other words, play is in some sense defined by the fact that it is "outside" the inside of ordinary life. And even if Huizinga's notion of the outside is meant more metaphorically than spatially, the idea of material place set outside of other places is a common theme in games. This feature of play was picked up and further emphasized through the term "magic circle", by Salen and Zimmerman. And while this term was used as a passing example in Huizinga, the idea of fantastic space delineated and separated from day-to-day reality has become a point of reference within game studies.

James Newman takes Aarseth and Huizinga an additional step by including the notion of cyberspace in his discussion of games and space. While admitting that the notion of cyberspace is problematic, both as a technical term used in a variety of contexts and its looseness as a theoretical term, he still sees the notion as useful in talking about games. If nothing else,

“At least part of the pleasure to be derived from engagement with the cyberspace of virtual reality according to Benedikt, apparently comes from their ability to play with and within these elsewhere spaces replete with their uncommon, perhaps even unpredictable, spatial rules.” (Newman 2004, 111)

From these theoretical vectors, we can begin to sketch a place for the notion of space and games. Games and space remain connected, both formally and theoretically. They are formally linked to space to the extent that the space within which the game takes place helps define the limits and opportunities of the play of the game, theoretically in the sense that the place of game play must frame a certain kind of “outsideness.” The magic circle, then, is a conceptual boundary that players must cross in order to enter the frame of mind that allows for play to occur. This frame of mind that Bernard Suits describes as the “lusory attitude” (2005), is more important than an actual spatial boundary. So, the place where games take place is important, but not necessary, for the reception of games by the players, and games’ ability to create the ambiguity of fun.

Space and place

*A site that conscribes or facilitates fun*⁵

Although videogame space is formally abstract, and can present an infinite number of spatial iterations, the notion of game space is largely tied to the notion of architecture as a system of spatial representation and design. Cyberspace, as described by Michael Benedikt (1991), is an inherently architectural concept. And so with videogames,

⁵ There is some theoretical confusion in the game literature around the use of the term space. Because of the immateriality of objects in videogames, there is no clear distinction between space and the objects that structure the space. In architectural terms, we could say that videogames do not distinguish between concepts of volume and mass. As a result, discussions of game space can drift from space as the visible surfaces and masses in a game to the discussion of movement through various volumes. In one case, a building in a game is a part of the constraints placed upon the game (you cannot jump over that wall, it is too high) to becoming active entities in the game (shoot the barrel, it will explode, cause the wall to tumble down on the enemy). This ambiguity around the use of this term is not resolved in this research, but is recognized.

the notions of space and architecture remain so tightly linked as to mean essentially the same thing in much of game studies literature. However, the focus to date relies on borrowing from the theoretical apparatus of architecture as a way to understand games. For example, Michael Nitsche's book "Video Game Spaces" (2008) takes this tact. Even though his exploration of the videogame medium starts from a "very specific angle—that of navigable-three-dimensional virtual spaces" (2) he goes on to elaborate a method that borrows from architecture, literary studies and cinema. In this way, Nitsche is direct in his borrowing of architectural theory as a component in an analytical framework he builds to talk about the feature of space in games.

Likewise, the work of Steffen Walz in "Toward a Ludic Architecture" starts out its analysis of play and games with the statement: "This book is a theoretical exercise toward a ludic architecture – i.e., an analytical and designedly understanding of contemporary play and games through the lens of architectural paradigms." (Walz, 1).

A more diverse set of positions emerges from the collected writings in "Space Time Play: Computer Games Architecture and Urbanism: The Next Level" (Borries, Walz, and Böttger 2007). This anthology of insight, review, speculation and theory proposes at least three distinct connections between games and place. While the book's primary theme revolves around the notion of using architectural and urban planning theory to better understand games, the various viewpoints also suggest an understanding of place as seen through the cultural influence of videogames as a medium and as games as a system of thought reflective of the human environment itself. These three perspectives might be described as "games through architecture", "games and architecture" and "architecture through games."

Three examples will help illustrate these distinctions and provide a context for further discussion.

Games through architecture

In his essay, Ulrich Gotz explores what he considers the close relationship of games and architecture. This relationship is due, in large part, to the increased emphasis in modern videogames on the notion of navigable 3D space. “Games and architecture converge at the point of visual presentation and experience of spatial constructs.” (Gotz 2007, 134) In other words, because of the emphasis on 3D space in games, game design increasingly relies upon the 3D environment as a meaningful component in the structure of the game and, therefore, players must understand the games they play from an architectural point of view (a point paralleled by Nitsche). The result is an increasing architectural concern in videogames—how architectural elements in games look, how they act and how they are designed. As Gotz states:

“This convergence in development methods and aesthetic appreciation translates into similarity in artistic results. Architectural designs, for example, avail themselves to the styles and spatial solutions of today’s games. Conversely, video games copy architecture in finely nuanced photorealistic presentation.” (135)

Even though Gotz sees opportunities for game designers to break away from the material and resource constraints that invariably limit architecture in the real world, he notes a surprising commitment on the part of games to the modeling and mimicry of physical environments.

“This preference for realistic appearance has significant consequences for the content of the game itself. It has become so pervasive that games are no longer about using the freedom of virtual spaces to make the impossible possible, but instead about making it possible to experience that which in real life is improbable.” (136)

He continues:

“And so arises the paradox that game designers copy the limits under which real architects operate even though these have no significance for virtual space....What architects experience as undesirable limits are welcomed by game designers because they confer authenticity on the designer end-product.” (136)

This accurate observation emphasizes why within the twin frames of architecture and games, the flow of theory tends to run from the architectural to the game. We use our understanding of the physical world, and the cultural role of architecture, as a setting in which to place our play. The presumption is that the better we understand how people experience buildings, landscapes and cities in the real world, the more useful the insight into how we can construct our play spaces to achieve other ends—namely fun. The fact that this orientation may unnecessarily limit the creative palette of the game designer becomes a secondary concern.

But while Gotz questions the focus on the representation of real world places in the construction of games (at least videogames), he provides a direct answer to the paradox he proposes. Why do we recreate the real in our fantasy?

“Does the possibility of comparing real and gameworlds strengthen the essence of game? Video games are particularly successful when they combine a break with particular limitations of reality in some areas with a retention of reality in others, inviting both comparisons with real life and with the spectacular.” (135)

In other words, authentic virtual architecture allows the player to experience something that is not real as real, to perform unreal action in real place. This structure matches the is/is not ambiguity at the center of fun and accurately describes what Gotz called “making it possible to experience that which in real life is improbable.” Driving sports cars at high speed through accurately modeled global cities, battling terrorist inside famous landmarks and even just taking in the view of a virtual New York City while running some criminal enterprise, the putative reality of the architectural place acts as a

component of the is to balance out the is not of the game's action. So while the games-through-architecture perspective privileges what we know about architecture to talk about games, and as a result, limits its usefulness in terms of talking about how fun operates spatially in the real world, this theoretical approach still helps illuminate the connection between fun in game space and fun in real space. Namely, when looking at how physical places work as a machines for producing fun, just as a game does, we must look closely at how these places both represent their material and cultural properties, and how they reject them at the same time.

Games and architecture

As a popular cultural form, games share a relationship with the built environment similar to that of cinema. Because where the movies have influenced the shape and perception of architecture, games fill a similar role. What we see on the movie screen shapes our understanding and taste for what we see on the street, and the design of real spaces responds, changing the built environment to meet those expectations.

So too, as games have risen in cultural relevance, their perception and fantastic reinvention of the real world have begun to influence the kinds of designs being built. Long after Constant and Price looked to play and games as a new form of architectural utopia, games continue to influence the world outside of their bounded fun.

A central example of games influencing the real world is SimCity. Even though, as Thomas has argued, "SimCity's central deceit is that it simulates urban life. Its central pleasure is that it only simulates SimCity..." (Thomas 2007, 211), the allure of the game's urban model remains.

Daniel Lobo notes, “No other game has been used so widely at so many levels of schooling to help illuminate the different elements of local government.” (2007, 209)

Despite the fact that play of SimCity lacks any direct public participation, federal influence or controls, or even a proxy for representation (such as a city council), the game has presented its point of view to countless students. SimCity approaches the city as a puzzle of resources to balance, a machine to be tuned through an ideal mix of taxes and canny urban infrastructure. In the process, the game presents an ideal model of a Stalinist state governed through thoughtful behaviorist policies. Or as Lobo questions,

“But shouldn’t a game of influence not just teach power accumulation but at least attempt to instill a sense of what civic development can and should do? Some sense of values that transcend a narrow interpretation of supply and demand?” (209)

Even though Lobo’s points about SimCity relate to issues more closely tied to understanding the system of urban planning rather than a system of architecture, including its visual presentation, the theme he illustrates runs through all forms of environmental design and understanding to some degree. As games become a method for thinking about and visualizing the world, their important spatial qualities also cause them to become a tool for understanding and shaping our environment.

Architecture through games

Although current theory of space and games focuses on the perspectives of understanding games using architecture and considering how games influence architecture, a third perspective is possible. As the core of this study suggests, we can use games as an abstract model for understanding the structure of fun, and therefore, fun places.

The notion of ubiquitous or pervasive games contains some of the most relevant research to date. By designing and examining games that take place outside of strictly formal spatial boundaries—the board, the court, the field, etc—these kinds of games happen in and around real places, interleaving game play with real life, overlapping the system of the game with the systems of daily life. As Bo Kampmann Walther describes:

“It is characteristic of pervasive games that they expand the gaming space, often by reconfiguring the social landscape of cities into a dense grid of game objects, game goals and game worlds, thus obscuring the demarcations between the real and the virtual. Pervasive games play with these demarcations.” (Walther 2007, 290)

Walther goes on to distinguish “play-space” from “gamespace”, where the former is the physical place that play action occurs in and the latter are the rules of the game system defining the play. This division between the “real and the virtual” or between play-space and gamespace helps create the ambiguity that lies at the heart of games. A bench in a park can be both a place to sit and admire a pond, but also the target for a Frisbee in an ad hoc game of Frisbee golf. Patrons might stay at a historical hotel imagining what it was like when “George Washington slept here”, treating the inn as both a commercial amenity and a place to play in this historical context.

Viewed in this way, the designed physical space contributes both material constraints—such as hills and walls, doors and stairs—that define a gamespace and further, contribute to a designed ambiguity. This ambiguity may be as simple as deliberately faux material and as jarring as the geographic and cultural dislocation of a medieval castle placed in the Colorado woods. Understanding the difference and relationship between play-space and game space is one way that games can help us understand architecture.

Time

The sense of time passing in a game

Much like space, time is an inherent aspect of games. From the point of view of computer science, all games are finite state machines. Rules define what is possible and all game exists from moment to moment in a discrete state of meaning in terms of rules. In Chess, each move is a meaningful moment in the game separate from all others. In tennis, while the ball flies through the air in a continuous arch, the game itself is silent until the ball strikes inside or outside the line. The discrete moments of the game determine the state of the game. Time is measured between these measured moments. Despite the central presence of time in game, the concept is relatively under-theorized and studied. (Juul 2004, 131) Still, there are a few useful touchstones in the study of time in games.

Juul's meditation on time in games provides a point of orientation. He notes a central disjunction in games between "play time" and "event time". Play time is the actual real world time a player spends playing a game, from beginning to end, and event time is time as represented inside the game. Because, in a certain sense, real world time, play time, is absolute, measured against the clock, and event, or game time, is measured solely in terms of the frame of the rules.

Because players experience, or at least exist within, these two time frames, a number of interesting features emerge out of games.

Central to Juul's idea of play time and event time is the idea of games and narrative. As games take on a more narrative role, the game's event time becomes linked to an internal notion of time. For example, Juul points out that a game such as SimCity may map two minutes of play time onto an entire year of event time. Within the fictive

frame of SimCity, playing the game for two minutes in the real world is equivalent to a full year passing in the simulated world.

As a consequence of this, Juul is able to point to several interesting features of game time. For one, the notion of mapping, just described, points to the flexible relationship of time in the real world and time in the game, as long as time in the game remains coherent within its own fiction. Games that do not present much of a fiction, such as Tetris, tend to feature a more one-to-one mapping between our perceptions of play time and game event time.

Juul's analysis of the cut-scene—a non-interactive cinematic element often used to provide additional narrative detail and direction—provides further insight. In almost all cases, the cut-scene interrupts the established mapping between play time and event time. So, a racing game might feature a one-to-one mapping of event and play time when it comes to racing. But a cinematic scene setting up the next big race can play with the event time, showing events from the past, for example, or simply providing a narrative outside of the established flow of game event time. As Juul notes, “cut-scenes disconnect play time from event time,” (135)

This analysis is important because it points to the plastic nature of the computer medium and its ability to blur game play with other forms of media.

“Interestingly there is something of a convention that the play sequence uses the full screen, while the cut-scenes are ‘letterbox,’ i.e black bars are added at top and bottom. This presumably signifies ‘cinema,’ and also indicates the absence of interactivity. The letter box presentation cues the player to interpret the graphics using cinematic conventions rather than game conventions.” (136)

This suggests an easy slippage not only between event time, as it takes place in the game, and play time, the real world clock ticking as you play a game, but also

between the interpretive contexts. Players easily slide between seeing their media as a game, using one set of conventions, and then to other, using a separate set of contexts, such as those of cinema.

Not only does this fit with our notion of games as a system for generating ambiguity, but also speaks to the rich interaction of contexts, conventions and player readings happening during play.

Further, Juul links the notion of interaction to his conception of event time. In a subtle point, he suggests that what makes event time is the ability for a player to interact with and cause meaningful change in the game state. We can easily observe this in a board game, where the state of the game advances, only when the player takes their turn. Any amount of play time, for example, can hypothetically transpire in a game of Monopoly between turns. But the event time of Monopoly only advances when a turn is played. So, even though computer games may run, behind the scenes, on an internal clock linked to play time, without player interaction, the notion of event time is un-necessary. Of course, without event time, for Juul, you are not playing a game.

Linking time to interaction results in a particular feature of games—namely that event time, like play time, is necessarily chronological.

“Flash-forwards are highly problematic, since describing events-to-come means that the player’s actions do not really matter. Using cut-scenes or in-game artifacts, it is possible to describe events that lead to the current event time, but doing an interactive flashback leads to the classical time machine problem: the player’s actions in the past may suddenly render the present impossible....” (136)

He does allow for the “detective model” of games, where the game world uses artifacts or cut-scenes to describe event time that takes place prior to the events in the

game that the player has the ability to influence through interaction. The game *Myst*, in Juul's description, is a perfect example.

Without directly addressing it, Juul's analysis suggests an inherent ambiguity in game time. This fits well with the overarching notion of games as machines for generating the specific sense of ambiguity we call fun. Because, while games can map play time to event time, or real world time to the game's fictive time as is done in one form another in games as diverse as *Animal Crossing* and *Quake*, they can also disjoin play time and event time, as most games do—where during a minute of game time a day or an epoch can pass by. Along these lines, distinct ambiguities in time, such as the anachronistic play of pretending to be knights, or cowboys or pirates, does appear to create the kind of fun that Juul suggests in his analysis.

Zagal and Mateas elaborate further on the subject of time, expanding beyond Juul's model with the concept of the “temporal frame”.

“A temporal frame is a set of events, along with the temporality induced by the relationships between those events.” (1)

They propose this analytical framework for time in games based on a “relationist” view of time. In this model, time is a phenomenological experience of the state change between two events. These two events can range from small scale, physical events, such as –dropping the ball/the ball hits the ground—to large scale chronological events—the beginning of WWII/the end of WWII.

Important in this approach is the focus on experience, since the relationships critical to this method of analysis depend on the player's perception of discrete and changing events.

“Discussing the temporality of a game requires that a player perceive events and the relationships between them. Thus, an experiential category of perception is fundamental to a relationist account of time.” (4)

From this platform, Zagal and Mateas observe four primary temporal frames in games:

Real world time: “events taking place in the physical world”. This is time that passes for the player before, during and after the game.

Gameworld time: “events with the presented gameworld”. This is time represented in the game, such as a day/night cycle that takes only minutes of real world time, but is meant to represent an entire day inside the game.

Coordination time: “events that coordinate the actions to players and agents”. Game features such as game turns define coordinated time, where the passage of time is controlled to allow the game to function.

Fictive time: “applying sociocultural labels to events, as well as narrated event sequences”. Examples include settings—this game takes place during the American Civil War—and the use of fictive time structure such as flashbacks, flash forwards and cut scenes (Zagal and Mateas 2010, 1)

They are clear to point out that these are not the only temporal frames available for game analysis. Rather, they argue that these are four primary frames through which players experience games. As a result, these frames work equally well across game types and genres, and further, relate to one another. For example, in the game *Animal Crossing*, real world time and gameworld time are mapped to each other, so that events happening during the day in the game occur synchronously with the real world day and, likewise, events occurring on Christmas in the game only occur on the real world

Christmas Day. Zagal and Mateas note that this kind of one-to-one synchronous mapping between gameworld and real time is rare, but not unexpected. Their framing analysis and relationist notion of time suggests that players are at ease navigating both inside an individual temporal frame—such as the change in game world events—as they are between temporal frames—the amount of time that passes in the day versus the amount of time that passes in the narrative of a game. As Zagal and Mateas make clear:

“What we have done is to recognize the generality of temporal frames. Where previous work has defined specific temporal frames that are assumed to cover the phenomena of game temporality, we have developed a definition of temporal frame uncoupled from any specific event progression.” (2)

In addition to elaborating on the ideas in Juul, this argument suggests that the player’s experience of time is even more malleable than we might first expect. Players not only can easily experience different flows of time from frame to frame—such as real time to game time to fictive time—but they can also reconcile disjunctions, overlaps and contradictions that emerge from overlapping frames.

What Zagal and Mateas describe as “temporal anomalies” only point to the strength of the ambiguity in time argument. Because rather than disrupt the game, anomalies such as temporal bubbles (game time in *Grand Theft Auto III* proceeds at one mapping to real time when the action takes place in the game’s outdoor settings, but this mapping pauses when a player enters one of the game’s building), warping (driving and walking across town in *GTA III* appears to happen in real time, even though the day night cycle is only minutes long) and non-uniformity (turns at the beginning of *Civilization* relate to several hundred years per turn and only one year per turn later in the game) become features of the gamescape.

Time, like other elements in the game system, can work to create the special type of is/is not ambiguity we think of as fun. The ability to fly through years of history in minutes, or evoke the distant past or possible future without ever leaving the present, represent a few select tropes that appear over and over in games. The framing notion of time provides a clear context for understanding the instrumentality of time in the construction of the fun in a game.

Just as important in this view of time is the observation that the experience of time can be manipulated through design. Contrary to a physical theory of time, the experiential or relationist sense of time is not absolute and subject to influence and change. Zagal and Mateas suggest two primary forms of temporal manipulation, metaphoric temporal cognition and sociocultural reference.

Of metaphoric temporal cognition they describe, “This experiential aspect can be partially captured in a structural framework by developing ontological categories for the various metaphoric relations between embodied spatial experience and temporal cognition.” (4) Basing this analysis off the work of Lackoff & Johnson (1999) and Boroditsky & Ramscar (2002) which describes how our perception of time relates directly to the metaphors we use to talk about time (running late, time flies, etc) as well as our spatial perceptions related to time (waiting at the back of a long line versus near the head of a line). From this research they distill the concept of designing frames inside of game specifically to alter the player’s self-sense of time in a specific direction.

In terms of sociocultural reference they state this can “...create a temporal fiction within the game world. For instance, video games can use either the passage of time, or real-world units or dates, to influence the perception of gameworld time.” (4) This

argument suggests that players in game respond to such narrative cues as “playing a soldier in the Civil War” or “battling aliens in the year 2150”. As a result, players willingly accept narrative conventions of time, and then expect coherence inside that frame. So, if, narratively, a minute of game time equals a month of game story time, then a task inside that narrative frame, say building a pyramid, should take much longer than a minute.

Time and place

The sense of time passing in a place

The key concept embedded in the notion of game time remains the malleability of our perception of time which allows designers to create specific types of temporal ambiguities we find fun. In spite of an urge to think of time as an objective property of reality, time in games clearly exists in a fluid milieu of perception and interpretation. The claim that the experience of time is a designable feature in games emerges not only from an analysis of the function of time in games, but also from the self-evident fact that game designers do use time as one of the many features of a game’s design.

Playing with time is possible because players can experience multiple frames of time that overlap contradict, cooperate and compete with each other. And rather than confuse the player, these experiential time frames generate the fun of a clear is/not is contradiction. We can easily enjoy “stepping back in time” at a Renaissance festival without removing our modern shoes or leaving behind our cell phone, for example. Games make it clear that players keep track of these sliding frames and their relationships. And even though disjunctions in these mappings are common, as Juul notes, not only can people manage these slippages, they also seem quite capable of

dealing with multiple, overlapping interpretive frameworks at the same time. A castle in modern times can be read as an amusement park attraction with specific spatial purposes in terms of the navigation of the park's visitors, act as a marketing symbol for the park's company as well as fulfill a narrative role about a princess who has fallen under an evil witch's spell in a time long, long ago. Cinderella's Castle can stand for current time, for the Disney Company's history and for the mystical fairy tale time of a Disney film.

Of course, this ambiguity—where not one or two but all three senses are perceived and do not reduce to a single perception and therefore makes the castle more fun than the office buildings outside the park—is always rooted in player/participant interaction and the flow of time that is necessarily chronological. This provides a bridge for considering game time and the use of game time concepts in real places. Because while a game has the ability to play with time in ways that are not possible in a physical setting, it turns out that game time always anchors back to objective time. In Juul's term, this is the necessary mapping between play time and event time, between the time that passes during play and the sense of time inside the game.

The notions of metaphoric temporal cognition and sociocultural reference make use of the relationship of real time to language to create spatial disjunctions common to real places—lines that wind to give people a sense of a shorter wait time and all manner of historically themed places and events.

By bringing questions of design into focus, Zagal and Mateas provide additional detail to the study of time particularly relevant to the study of real places. First, their notion of “real world time” provides a broader framework for understanding objective, clock, time than Juul's play time. Real world time takes place whether someone is

playing or not. Further, real world time always provides a consistent frame of reference by which to create the time contradictions that cause ambiguity. So, “present day” is the real world temporal frame by which we can see that “medieval knights marching down the street in a regal parade” is meant to be understood inside some other, separate, temporal frame.

Zagal and Mateas propose at least two additional categories to supplement the notions of play or real world time and event, or gameworld time. They propose coordination time and fictive time.

Coordination time, such as the periods in a basketball game, become a method to organize players, and spectators, in space and time to allow for a game to occur. Coordination time, then, becomes a form of spatial practice, and one familiar to any environmental design practitioner, whether examining shadow paths in a proposed building or an urban planner considering seasonal use of space. Interestingly, Zagal and Mateas’ notion of coordination time does not initially appear to feature the strong aspects of ambiguity as other temporal frames do. But, close analysis reveals that in fact they do. Just as coordination time is properly understood as a temporal *and* spatial frame, the notion can be understood through the previous analysis of space that suggests spatial separation. This connects to the “magic circle” concept, describing how a place, and now a time, are set outside ordinary life to create an opportunity for play. Thus, sports quarters and school recesses become times, and places, set outside ordinary times and places, but objectively speaking, never can exist outside of material time and space.

So, an event such as “Manhattenhenge” can be understood as a coordination time-framed temporal disjunction—time that is not time--meant to be experienced as fun. Due

to a serendipitous offset from the usual north/south orientation of the Manhattan street grid, twice a year in the spring and the fall, the setting sun aligns perfectly with the city's downtown canyon of buildings. New Yorkers take to the streets to marvel as the sun sets perfectly over a horizon framed by the streetscape. While admitting that the event is "accidental", Bryan Penprase describes the event as "fascinating archaeoastronomy case study in an modern city!" (2011, 232)

When viewed as a simple coincidence, the presence of Manhattanhenge makes little sense. At any minute of any day, some point on the earth certainly features an accidental, but formally pleasing alignment of the celestial bodies and human environment. But when considered as a form of coordination time, the event makes sense for what it is—a moment of civic play, when an entire city is reminded to set aside 20 minutes to experience something outside of normal life. As much as the starting gun in a race or a referee's whistle at the start of a game, Manhattanhenge is an artificial signal to people to people to being play.

Zagal and Mateas' frame of fictive time also helps translate the analysis of game into the real world. While Juul sees time as an aspect of the half-real, semi-narrative nature of the game itself, Zagal and Mateas remove narrative, in terms of time, to its own frame. This move suggests that games do not require a fictive frame to operate, but that the tools of narrative can be employed to create specific sense of time. Setting the same game in the American Old West or in the far flung future do not change the game's mechanics, but can alter the way players experience time, possibly game time as well as real time, inside the game. On this point Zagal and Mateas and Juul agree—narrative tropes related to time can function as primary tools for adjusting a player's sense of time.

In the design of real world places, the use of the fictive frame is common. Perhaps no place has done a better job of taking the traditional tools of narrative time-shifting and interpreting them into an environmental setting than Disneyland. In this context, the plaque that greets visitors entering the park seems particularly honest about its intentions:

HERE YOU LEAVE TODAY
AND ENTER THE WORLD
OF YESTERDAY, TOMORROW
AND FANTASY

Architectural anachronisms outside of the theme park provide obvious examples as to how real space plays with time. A visit to Colonial Williamsburg, for example, presents a number of analytical paradoxes to the historian regarding authenticity. But from the standpoint of fun, the charm of strolling along a cobblestone street on the eve of the American Revolution connects exactly to the ambiguities surrounding the authentic. Visitors sporting a newly acquired tri-corner hat have no illusion that they have somehow slipped hundreds of years into the past. They remain firmly grounded in the present. However, the material facts surrounding them, from the restored buildings, the absence of cars and televisions and the presence of actors in historical garb, speak to living temporal frame from the past. The play time of the visit, to recall Juul, and the event time of the fiction of a living town from the past, co-exist and cooperate to produce the kind of ambiguity familiar to any game player, and the kind of contradiction of terms we describe as fun.

Implicit in this discussion, and a point made explicit in Zagal and Mateas, is that these perceptions of time are deeply influenced by designed temporal frames. In other

words, designers of games and of places can use to time as a part of schema to generate fun.

Goals

The desired end of the game.

While the notion of goals is often attached to a definition of the term “games”, no one has more carefully dissected the definition more carefully than philosopher Bernard Suits. By way of detailing a sound and analytic definition of games, he successfully clarifies the relationship between “game” and “goals.”

Suits definition of games turns on a philosophical analysis of means and ends. For example, he distinguishes between work and games by arguing that while the means can be the same, the ends differ between work and games. This is to say, the nature of goals in games separates them from other forms of activity. He pursues this distinction by recognizing games as “goal-directed activities” (49) He then carefully describes game goals in three distinct, but closely related, senses:

The goal of participating in the game (such as running a race)

The goal of winning the game (such as winning the race).

The goal of achieving the winning condition in a game (such as crossing the crossing the finish line ahead of the other runners)

Conventionally, these three goals are usually merged together. But Suits notes that they are separate things. For instance, you can participate in a game without any intention of winning (as parents often do with their small children), you can have the goal of winning a game while fully planning on cheating or, perhaps absurdly, you can have

the goal of achieving the winning condition—such as crossing the finish line—but in a manner that does not count as winning.

Separated, Suits analyzes each in turn. Of the goal of achieving the winning condition Suits argues that this is a “prelusory goal”. He suggests that this goal is “before the game” in the sense that there are any number of ways to achieve an end such as crossing the finish line first, or placing a golf ball in a hole that fall outside the bounds of the game itself. You could, for instance, cut across a turn in the race track to more quickly reach the finish or simply carry a golf ball to its destination on the green. As a result, it is only the goal of winning the game, an action defined by the rules of the game, that becomes the “lusory goal,” or goal of the game proper. Following this line of thought, the goal of participating in the game, he suggests, is not actually a part of the game. The desire to play a game is merely a goal in life, like many other goals such as “wealth, glory or security”. While he does note that the desire to play a game is a lusory goal, in that it is concerned with games, he calls this a “lusory goal of life rather than of games.” (51)

To understand this breakdown of goals into pre-game, game and non-game goals, it helps to consider Suits complete definition of a game, in which fits his analysis of goals:

“To play a game is to attempt to achieve a specific state of affairs [prelusory goal], using only means permitted by rules [lusory means], where the rules prohibit use of more efficient in favor of less efficient means [constitutive rules], and where the rules are accepted just because they make possible such activity [lusory attitude]. (54-55)

Or more simply, “playing a game is the voluntary attempt to overcome unnecessary obstacles.” (55)

Important in this definition is a need to attach rules to goals. The lusory goal in Suits model cannot be separated from the rules. “Rules in games thus seem to be in some sense insuperable from ends, for to break a game rule is to render impossible the attainment of an end.” (39) As a consequence, the game goal is always implied, if not explicitly spelled out, in the rules.

This fact results in a specific consequence of Suits’ perspective, the portability of means and ends.

“There is, that is to say, no difference in principle between creating a challenge by an artificial prohibition of more efficient means to a goal and artificially choosing a goal just because the means for its achievement present a greater challenge than do the means for achieving a different goal.” (87)

These insights explain a particularly interesting point in Suits long form examination of the definition of a game where he claims that, “triflers recognize rules but not goals, cheats recognize goals but not rules, players recognize both rules and goals.” (60) In other words, those who play games, but not in earnest, are triflers. They break the definition of a game, and as a result the ability of the game to function, through an acceptance of the rules, but not the goals of the game defined by the rules. The cheat destroys the game by ignoring the prelusory goal and substituting some other motivation or goal (such as pride or financial reward) in place of the lusory goal embedded in the rules.

This might seem like definitional quibbling at first. However, these arguments describe two important aspects of the game machine. First, Suits arguments clarify the necessity of lusory goals realized as lusory means inside constitutive rules. In this sense, lusory goals are a necessary component of the game machine. Second, the implied nature

of lusory goals inside the rules of the game point to a particularly recognizable feature of the game machine, namely that rules are always evident, but goals maybe be submerged inside the rules.

This explains games such as *The Sims*, which often find themselves sidelined as “corner cases” in the world of games (in Juul’s definition of games) because of their lack of explicit goals described in the rules. Of course, *The Sims* is a form of role playing as game. And Suits anticipates this in a series of arguments that dissolve the open play of the role play into a clear game concept separate from theater. He places role playing and other games without a seeming objective or goal into the notion of the “open game”. Open games are, as opposed to the super-category of games (he does not use the term “closed games”), are “games which have no inherent goal whose achievement ends the game...” (122)

Unlike a race with its finish line or a baseball game with the bottom of its final inning, open games continue for as long as the player choose to keep the game in motion. From this point Suits derives the most critical aspect of the open game, a goal of a type unique to this formulation of the bigger game category.

“I would define an open game generically as a system of reciprocally enabling moves whose purpose it the continued operation of the system.” (124). Thus, two children playing at cops and robbers may constantly reinvent the rules and squabble over the enforcement of previously established limits in the game. But the only move that is critical is the one that ends the game. When one kid claims “I shot first, you are dead,” the game continues. It is only when the other kids demands, “No you didn’t. That’s cheating. I am going home,” does the open game dissolve.

Suits also points out that the logic of the open game is not limited to role playing. Athletic contests that avoid defining a winner to keep the competition in motion would fit his definition. And, returning to *The Sims*, games that don't provide the player an explicit goal to achieve work well inside the open game definition without forcing the player into the position of the pure role player, the thespian.

Through these philosophical threads, Suits reveals the embedded and critical nature of goals in games. Whether goals are explicitly stated, defining a winning condition or whether the goals are implicit, as in the case of the open game of role playing, the game system requires goals. Without goals, the game machine sits broken.

Goals and place

The desired end of some action in a place.

Although Suits explains why goals are a necessary component of a game, he does not explore the larger question of whether game-like activities could exist that do not include a goal of any type. In the context of this research, there is an open question as to whether fun objects, such as buildings, must function as a game in order to provide fun.

Setting aside that question, and considering the notion of the open game, it does seem that places meant for fun will provide, or at least allow, participants to pursue either explicit or implicit goals or both. That is to say, goal-less, but fun environments remain a theoretical possibility at this point. But the focus on the subject of goals as conceived in Suits' analysis of game suggests that all fun environments, as fun machines, will provide for or allow goals.

The challenge when translating Suits analysis for use in environmental analysis rests on the ability to attach his key terms to subjects outside of games proper. Can we

find a use for prelusory goals, lusory means, constitutive rules and the lusory attitude in the analysis of a fun place?

Fortunately, Suits abstract construction allows for easy porting to apparently non-game areas such as fun places.

Several short cases will illustrate how Suits terms work well in physical environments and help explain why they are fun.

In the first case, imagine a prospect tower in a park. The prelusory goal is to reach the top to take in the view. The lusory means is to climb a series of small stairs to reach a small window at the top. And while there is a view, it is a cramped space with a limited ability to view the scenery. If the goal was to actually survey the area, then a ladder, an airplane or even a view from a nearby building would be more efficient. So, the prospect tower meets the requirement that lusory means are the less efficient means. The constitutive rules, as we have seen from the previous analysis of the rules, are found in the material structure of the tower itself. The building defines the possible means by which a player could ascend to the top. And finally, the lusory attitude is often provided by the mere presence of the challenge—in this case a tall tower in a park.

Reflecting on Suits idea that “games are goal directed activities”, we can see that the tower itself provides the goal in structural, material and site conditions. One only needs to image a locked door with a sign, “unstable structure” to see how quickly a fun building can turn into something less so without any actual change in the physical conditions of the structure.

This example points to the insight in Suits that goals are sublimated into rules. And in the context of physical space and material place, these rule constrains are as often

the material affordances of the building as they are other rules such as, “Don’t climb on the building” or “Enter only after purchasing a ticket.” In fact, because of the material conditions of buildings, we might even say that all buildings structure a necessary set of goals, potential or otherwise. Of course, Suits description of goals prevents us from assuming all buildings are fun because of their goals. However, he does allow us to find play in almost any human habitat—so long as the conditions of the prelusory and lusory means are also met.

In this sense, buildings meant to be “played with” in terms of their use as a site for fun most closely resemble Suits super-category of the game. But many fun structures actually fit better with Suits definition of the open game.

A visitor to Las Vegas may arrive at the gates of Caesar’s Palace intending a weekend of swimming, gambling and fine dining. But those goals would seem at odds with the corny Roman façade. Even more so, the façade gives way to a sensorial overload of theming, from regal carpets and statues to the Roman Caesar’s seal on walls and glassware. All this distraction and spectacle does not present a clear connection to swimming and gambling.

Looked at from the previous example of the prospect tower, Caesar’s Palace seem to have no intention to encourage you to interact with their stagecraft. At best, you are meant to marvel at it. And here is the clue that this category of environment is intentionally designed as a kind of open game with the intention of extending the game, or the fantasy of being someplace else, someplace exotic, some place hedonic. And the visiting gambler cannot help but find themselves absorbed in the fantasy presented in all its architectural grandeur, and start to play the role of wealthy tourist allowed into the

court of the Roman ruler. Almost the entire entity of Caesar's Palace is designed to support the visitor's lusory attitude.

This characteristic of place as a kind of open game is even more pronounced in the context of the theme park. When visitors arrive at Disneyland we could say that they have paid for a ticket into a willing fantasy. In return, Disneyland constructs a material place designed at every turn to shut out the *sturm und drang* of the outside world and replace it with a childlike sense of wonder, exploration and joy.

So, we could say that the prelusory goal of relaxing is met in Disneyland through the massive presentation of physical fantasy and codes of conduct of constitutive rules providing a lusory means to that ends. Rather than enjoying a trip to the backyard hammock, visitors invest in expeditions to the Magic Kingdom. The ultimate fantasy of a Disney property as the "Happiest Place on Earth" provides a constant feedback loop reinforcing the necessary lusory attitude required for visitors to achieve the goal. This lusory attitude is fed throughout a Disney vacation, materially and culturally, to sustain the open game as a standing wave of experience of fun.

Information

"What the players need to know and what the game system stores and presents in the game states." (Järvinen 2007)

Most definitions of games and surveys of game taxonomies do not explicitly deal with the notion of information. Even those that do, treat the concept so loosely that it easily can disappear into elements such as rules. Looking more closely at the various taxonomies which do treat the concept of game knowledge or information provide an important piece of the total game puzzle.

Konzack's description of game knowledge, for instance, relates directly to the question of game information:

“There exists different kinds of knowledge in a game: open knowledge (quite often the rules or statistics), hidden knowledge (e.g. strategy of other players), and random knowledge (e.g. rolling dice or other kinds of randomization).” (94)

In other words, players of a game must know certain things in order to interact with the game system in a manner meaningful in terms of game play. This observation seems obvious to anyone who has fiddled in frustration with a game that they “didn’t get.” You have to know something about the rules, the goals of the game and how to read the game state in order to partake in the act of game playing. A box of Monopoly is just a collection of parts if you are not familiar with the rules, or at least plan to play the game with a patient tutor who will walk you through the possible actions.

A further implication of Konzack's claim is that the knowledge layer is somehow a structural component of the game itself. In one sense, a player of a game must understand all sorts of cultural and physical constraints to even create the space in which a game is played. The rules of chess may not explicitly rule out yelling at your opponent while they contemplate their move, or of setting up the chess board on a sloped surface, but these cultural and material constraints are something a player must “know” in most cases in order to even start the chess-play system.

Instead, the knowledge that Konzack describes is an informational layer that the game system must present and maintain in order for the player to interact with the game. Even in his sub-categories of “hidden knowledge” and “random knowledge” he points to a meta-construction of knowledge. I may not know what specific strategy my opponent is deploying, but I know that she is working from some sort of strategic point of view. I

may not know the next number that will appear on a die. But I can compute probabilities and understand that a die roll presents a set of potential knowledge. If I play a game either lacking hidden knowledge, or lacking an understanding of hidden knowledge, then the game may not be able to function. Imagine a situation where an opponent in a game is assumed to have no hidden knowledge to add into the game system. The notion is completely destructive to the idea of most competitive games—like two chess players openly discussing their moves with each other. Likewise, in a game lacking an opponent with hidden knowledge or a random event pouring informational variability into the game, the game itself slides toward a static puzzle, with a correct answer as an outcome rather than a winning condition.⁶ Even though some knowledge is hidden or random, its presence in the game allows the game to function in the same way that knowing the rules allows the game system to function. Knowledge, or perhaps more accurately, game information, is yet another necessary component of a game.

Järvinen presents a similar, if slightly more mechanical notion of information in games. Of his atomic game elements he describes information as, “What the players need to know and what the game system stores and presents in game states: Points, clues, time limits, etc.” (135). In this case, information is not only what the player needs to know to play the game, but also data stored by the game system that allows the game to operate.

⁶ This observation points to a distinction between the categories of games and puzzles. Where puzzles present complete information, or knowledge, a game always hides some knowledge from the player. So, the difference between games and puzzles is one of information. For example, the difference between a chess puzzle and a game of chess is the information available to the player. In a chess puzzle, the player is presented with all of the information required to find a solution. The possible moves the imaginary opponent might make do not affect the best outcome of a series of moves that solves the problem. Likewise, a chess match always hides the strategies and plans of the opponent. In this sense, any game can be converted into a puzzle by exposing all hidden information—such as playing Solitaire with all cards face up. On the flip side, a puzzle can be presented as a game by obscuring some of the information needed to reach the answer, or by otherwise hampering the effective solution of the puzzle—such as by the addition of a time limit.

In this sense, Järvinen elaborates on Konzack's notion by pointing to information hidden in the data structure and storage of the game system itself. This fits with a notion of a game as a sort of computational system, complete with inputs, outputs and operational data.

At the same time, Järvinen sees information as a more constrained category than Konzack might. For example, among Järvinen's elements in addition to information, you find "ruleset", "environments" and "contexts", which he describes as "Where, when, and why the game encounter takes place." (135) On face value, this is a sort of player information. But it is not in the same class of information as game points, clues and time limits. Rather than attempt to untangle the potentially epistemological knots tangling together knowledge with information, or the difference between different kinds of information required for a game to function, the important implication here is that there are things a player must know to play a game. And in specific cases, this information must be produced and known by the game system.

Järvinen nuances his position somewhat by clarifying the relationship of information to other elements in his taxonomy.

"By minimum, a game has to have Components, Environment, and at least one Game Mechanic. When the relationships of these three elements are defined and implemented, it means that a Ruleset emerges, as does Information." (135)

His elements ruleset, game mechanics, theme, interface and information become what he calls "compound game elements", meaning that they exist only within the context of the primary elements of components, environments and game mechanics. Critical information might be added to a game component to describe to the player how that component functions—much like the rent prices on a Monopoly property card.

Information, in this context, is really a distinct element embedded in the game system, and knowable on its own. Game points appear as a case example of Järvinen's information—a game element that allows the player to understand the state of the game. Following this line of thought, anything in the game that creates information the player needs to know in order to understand the game system so they can play may be considered a type of information. And on this point, Järvinen and Konzack appear to have a similar perspective.

Game designer Dan Cooks provides another use of the term “information” and situates it in a more specific context than either Järvinen or Konzack. For Cook, information serves a specific purpose inside the structure of the game mechanic. In his model, a game mechanic features four distinct parts, a player action performed in some sort of simulation, where the simulation provides feedback that the player synthesizes and filters, informing future action. (Cook 2006) Cook's view of a game mechanic, then, looks very much like Crawford's interaction model.

Important to the conceptualization of information is the classification of the feedback a player receives, synthesizes and filters. In this step of his game mechanic loop, Cook divides feedback into “tools” “useful info” and “useless info.” Tools are discoveries of new actions that a player can perform in the game. A game mechanic can, then, provide players access to new game mechanics as the result of the feedback of a prior game mechanic. Useful info is, “knowledge about how to affect useful changes in the simulation,” while useless information is feedback that doesn't advance the player's understanding of the game model or simulation.

Information as a component of the game mechanic becomes a synonym for meaningful feedback. This view of information extends the previous ideas about information to suggest that game information surrounds all other game elements, and forms the raw material of the interface between the player and the game.

What each of these three notions of information as a game element lack is any sense of how adding more information into a game helps with creating the is/is not experience—the sense of fun. But it is implied.

In Cook's view of "useless information", there is information which does not advance the player's understanding of the game. By extension, game information should continually drive the player's exploration of the game space, continuing the play. Rather than consuming the central contradictions of the is/is not of the game, information is a part of a strategy of maintaining the fun. Oddly, it can also end it, as in: Game over.

This concept helpfully points to two additional points about the role of information in games. First, it illustrates how the ambiguity that operates with fun is not the same thing as confusion. Adding clarity to a game system can strengthen the game. If players do not understand how the game works, they cannot begin play. Second, Cook's observation that useful information extends the period of time in which the game system functions—extending the play in loops of discovery and delight—points to value of information as a supporting construct in games. Not only can information support other game elements, as Järvinen suggests, such as supporting the narrative of a game (You are a knight who must rescue the princess), information can also fuel the core ambiguities of the game (You have Park Place—but what would it be like to own Boardwalk too?).

Information and place

What people need to know in a place to understand the state of the spatial experience.

Environmental information takes many forms. Signs mark boundaries (employees only), orient visitors (exit) and describe use (push/pull). Likewise, the environment itself fills with cultural codes, some explicit (the velvet rope) and some less so (arm rests on chairs at the airport to prevent patrons from lying down across a row of seats to take a nap).

These kinds of deliberate signing in a place fit with Järvinen's notion of game information. And the translation is easy to make when looking at amusement spaces and tourist sites. Themed signs direct visitors at Disneyland to the nearest collection of attractions and informational signs showing wait times for popular rides are constantly updated and consumed by the throngs. Likewise, visitors wandering through a historic home quickly grasp the symbolic meaning of a thin chain strung across a threshold and read the minor obstruction as a demand to "Do not enter." Taken together, this sign posting of information forms an informational layer that helps visitors in these places better understand their role in terms of the place, and to start to grasp the opportunities available to them to interact and explore.

Beyond the signposting of information in a place, Konzack and Cook's ideas help form a view of information as both a driver to uncover more and feedback that stimulates further interaction with the place. In the same way that a player might probe the possibility space of a game through successive iteration of actions—trying this and that in a game looking for new effects or actions—so do players in an environment. A common bit of parental advice before sending a kid to explore a new place—whether it is a mall or a grove of trees—is to provide informational boundaries. Don't go past parking lot, be

back in an hour, keep an eye out for your brother, watch out for snakes, etc. Within this informational context, open exploration can occur.

Likewise, lacking clear information in an environment, people will make mistakes.

In the Disney theme parks, a visit to the home of Mickey Mouse in Disneyland remains on the list of key attractions to explore. A walkthrough domestic sculpture drawn in bulbous cartoon lines and primary colors, the life-sized diorama invites guests to sit on Mickey's chair, wander through his pantry and even peer into his wash. And though the overstuffed chair is made of hard plastic and the wash forever tumbles suds behind a closed glass window, the visitor is left with a sense of exploration. Anyone wandering off the streets of Disneyland's Toontown and through the open door of Mickey's house is a welcome voyeur.

But lacking more clear information as to how deep the visitor can dig into Mickey's private affairs, guests experiment. Every knob is twisted, checking for the merest feedback, a blinking light or short blare of sound, or hopes that a door will open. But, of course, the doors are all false and the brass colored paint on the oversized plastic door knob is worn to the fiberglass base by guests pursuing false interactive leads.

The paint-worn doorknob in Mickey's house becomes an emblem for poor information in play space. Over and over again, visitors attempt to manipulate the space in an un-manipulatable manner. As a result, the theatrical spell of visiting the house of a cartoon mouse is broken just a little bit by the realization that the promise of interaction is just a ruse, and the house is just a set.

Compare this to another feature of a twin attraction that once resided in the Magic Kingdom at Disney World. Just inside the entrance, a set of stairs led off to an upstairs. And while the exterior of the house belies the possibility of a full-sized second story, the stairs gesture toward a private quarters just a floor away. But the stairs are blocked with what appears to be a doggie gate. This small gate featuring a cut out of Mickey's dog Pluto serves the purpose of fitting within the narrative of the house, but just as importantly, provides information to the visitor—the upstairs is off limits. By providing environmental information inside the house's narrative, the visitor is left with the sense of walking through a real house and is encouraged to continue to explore. The information provided by the doggie gate structures the experience and, as result, supports the environmental system of fun contained by Mickey's house.

In some cases, the information in a fun place is made even more explicit through devices such as narratives and maps. Common at a tourist site, whether a national park or the home of a dead celebrity, is a guide who recites rules—don't touch this, don't photograph that—as well as maps that define routes, behaviors and provide narrative background meant to frame the experience. These deliberate informational overlays may, at first glance, appear to provide only practical control over visitor behavior in the interest of maintenance and preservation of a site. When looked at as a form of informational element in a game system, these recitations or rules and back story appear as components of a successfully functioning system of fun.

Information in a fun place, then, works in the same role as it does in game. Visitors to a place, viewed as players, require information to structure their understanding of the various other elements of the space—its rules, narratives and goals, for instance.

When people experience a fun place, they explore the space and test its system of fun, looking for feedback in the form of meaningful information. Designers of fun places can enhance this experience through a variety of informational techniques, including signs, maps and narrative.

Interface

The presentation of the game's information and controls.

While all games can be said to have an interface, the videogame legacy in digital computing brings this element to the fore. Just as human computer interface (HCI) defines a legitimate and important field inside of computing, so the notion of interface remains a key component of the functioning of the game system.

The game ontology project uses interface as one of its top-level organizing elements, and defines it as, “Where the player and the game meet by means of presentation, input method, and input device.” (Zagal 2006)

This abstraction makes clear a distinction between the game system and the player interacting with that system. But where the notion of interaction assumes some sort of control scheme by which the player can influence and receive feedback from the game system, the notion of interface attempts to define that plane. Further, the Game Ontology project also clarifies that information in an interface flows both ways—the game presenting information to the player and the player providing information to the game system via an “input method” or “input device.” And while this distinction between devices and methods may reveal a computer science bias in the discussion of interface, the notion that an interface is implemented in some tool (a device) and a method (what that tool can do), is a useful construct. So, whether pushing up on a joystick tips the

camera up or down is a well-known interface device mapping in videogames. In flight games, pushing a joystick up usually aim the camera down, in emulation of an airplane's yoke being pushed forward, sending the aircraft into a dive. This mapping between the input device and the input method is conventionally called "inverted controls".

Conversely, many players of first person shooter games prefer that pushing the joystick up, or forward, aims the game camera up, away from the ground. Because different groups of player prefer one mapping over the other, most 3D games including the ability to toggle on and off Y-axis inversion.

This example points to the critical nature of the interface. Without a useable and comprehensible interface, a game system cannot connect with a user, the player. Without a player that can "read" the information in the game system and enter into an interactive conversation with the game, via a functioning feedback loop, the game sits only in potential and play never occurs.

Because of this, interface encompasses a broad range of potential topics, including:

Ergonomics: Are the input devices usable by the player? If an input device is too heavy to hold or requires too much practice and dexterity to use, for example, the interface can fail. Some players avoid board games with "lots of little pieces" because of an interface preference to avoid manipulating "lots of little pieces".

Informationally clear: Does a player know what they are supposed to do? In one sense this is a question of the success of the informational elements of the game. But a poorly designed start button, for example, can leave a player frustrated because they cannot figure out how to begin the game. Any case where the information is available,

but the interface does not easily afford the player a method to access this in the interface layer, may fail. The Game Ontology project defines this sort of comprehension of the game state as, “cardinality of the game world” (Zagal et al. 2005, 6) and suggest that the interface is ultimately responsible for letting the player know where they are in the game.

Dynamically clear: As illustrated in the “inverted controls” example, if input methods are interpreted in a different manner than the player expects, this can be considered a breakdown of the interface. Any player who has attempted to play a game with inverted controls when they expect them to function in the opposite manner can speak to the rapid and jarring breakdown of interface. This is the videogame equivalent of pushing on a door marked pull.

Because interface sits at a chokepoint between the player and the game system, the design and analysis of interface receives much design attention, but little focus in terms of analysis. After all, when an interface functions, the player has access to the game system and the value of interface becomes transparent. Like a clean window, the viewer only notices dirt and glare. However, the function of the interface remains an important part of the critical language used in understanding the successful functioning of the game machine.

Interface and place

The physical presentation of possibility in a place.

Zagal et al in their work on the Game Ontology Project elaborate the notion of “interface” as a game element, stating:

“The interface provides the means by which the player experiences the game and takes action within the game. The presentation provides the sensory experience of the game, input devices provide a mechanism for the player to choose between physically discriminable signals, and the input method maps

the signal selected via the input device onto a game action (entity manipulation).” (Zagal et al. 2005, 5-6)

Translating this description for use in terms of environmental fun with a few key substitutions, we can derive notion of a spatial interface:

“The interface provides the means by which a person experiences a place and takes action within the place. The presentation provides the sensory experience of the place, architectural features provide a mechanism for a person to choose between physically discriminable actions, and the feature maps the action via the input device onto a meaningful result.”

This definition risks turning the entire material structure of a place into a form of interface, but does provide a means for separating material from interface. A wall may provide structural support; it could provide desired environmental protection against the elements; it may segment space according to cultural orders; but it also may provide an interface for the person in space. A wall can speak “support”, “shelter”, “off limits” or, key in the context of fun, “explore”, “progress”, “discover” and more.

In this sense, all architecture could be considered an interface—a physical as well as cultural interface—in addition to the various other meanings attached to its physical properties.

However, viewed more instrumentally as a mechanism to connect the player or person in a space to the mechanism of the fun machine, the notion of environmental interface provides a focused lens for considering a variety of architectural features. In this sense, the game notion of interface seems to match with James Gibson’s concept of “affordances.” Donald Norman helpfully sums Gibson’s affordance as “actionable properties between the world and an actor (a person or animal).” He continues, clarifying,

“They exist naturally: they do not have to be visible, known, or desirable.” (Norman 1999, 39)

So, a chair affords a person a place to sit. But it also, perhaps non-obviously, affords fuel for a fire, a step-stool to reach a top shelf or a prop for a lion tamer. Anything that the chair could be used for might be considered an affordance.

This caused Norman to invent the term “perceived affordance,” which describes:

“The designer cares more about what actions the user perceives to be possible than what is true. Moreover, affordances, both real and perceived, play very different roles in physical products than they do in the world of screen-based products. In the latter case, affordances play a relatively minor role: cultural conventions are much more important.” (39)

In this view, physical objects may have a wide set of potential affordances, but the perceived affordances are more important. Perhaps a chair would make good firewood. But if this use does not come to mind, then it is not primary. Norman’s notion that screen media, such as videogames, depend more on cultural conventions is important as well. It suggests that in an ambiguous situation, such as that of wondering, “What can I do in this game?”, we tend to rely on cultural conventions such as—sit on chairs, don’t burn them. Here we can extrapolate that in the context of fun, context drives the perceived affordance.

This might help explain why the notion of affordances fits well with the notion of games. Daniel Pinchbeck calls Gibson’s notion a “powerful tool for understanding the relationship between player and system.”(2009) This point clearly places the notion of “affordance” in the same definitional space as “interface”. Or, as he describes, “(W)ithin a ludic context, an affordance can be described as the functional input/output relationships of an object in the context of the game environment.” (1)

A deeper analysis of the concepts of affordances in gameplay linked to subjects such as an inventory of archetypical affordance in videogames (Pinchbeck 2009) or as a means to understand the learning potential in games (Linderoth 2010; Linderoth and Bennerstedt 2007) promise to cast additional light onto the subject of interface in physical environments. But within the scope of this survey of elements of the game as fun machine, the notion of environmental affordance provides a clear linkage to the literature relevant to the subject for future study. An interface, as described in the game literature, can be thought of as a perceived affordance in a place. For a place to afford exploration, for example, it must also afford the visitor a sense that doors open into something discoverable.

This notion of affordance as environmental interface also helps explain the worn doorknob in the Mickey Mouse House, discussed under the section on information. The door in the Mouse House provides an interface which is perceived as possible exploration. The environment appears to afford an opening door. The door knob cannot keep its paint as a result of the constraint exploration the place's interface suggests is possible.

A successful environmental interface, then, is a coherent method that presents a variety of participant information in a form that provides access to the greatest range of designed affordances. In the case of the fun place, these affordances relate to specific features of the place as a machine for generating fun.

Point of view

The player's relationship to the game, inside the game.

Thomas and Haussmann have argued that the camera system in the contemporary videogame has become a something of a “visual cliché”. Because videogame scenes are often rendered using the conventions of cinema, games often rely on cinematic technique to enframe their visuals. (Thomas and Haussmann 2005, 1) In videogames, then, the selection of camera by the designer also becomes the player’s point of view into the game environment. The game player often “sees” themselves in relationship to the game through the context of the conventions of cinematic storytelling.

As a result, the game genre “first person shooter” simultaneously describes a specific camera system, (where the game camera acts like a cinematic camera strapped to a game character’s chest or perhaps forehead, revealing the surrounding environment as well as the character’s forearms and hands), a specific point of view in the narrative sense, where the player is playing the game from the vantage point of the main character, as well as a specific perspective of “looking through the eyes of the character.”

What the example of first-person games reveals is the somewhat tangled nature of visual representation, narrative representation and interactive point-of-view in games. The example also points to the importance of perspective or point of view in games demonstrated by the construction of an entire genre defined by two principle properties of the game—how you see it (first-person) and what you do (shoot).

And while videogames merge the question of the optical perspective with the issue of narrative and interactive point of view and perspective, all games can be said to have a point of view. Whether marshalling armies across the continents as a general in the board game Risk, or working the wheels of capitalism as a real estate magnate in Monopoly, the player’s role helps define their possible range of action. Even in abstract

games, such as Tetris or the table-top game Blockus, the player functions as an abstract game operator, a point of view with specific privileges and limitations.

In one sense, these roles, and even the functioning of a videogame camera, can be said to be a part of the game's rules. But in practice, the question of the player's point of view into the game appears at a liminal edge between rules and narrative.

Newman recognizes the precarious nature of game point of view and suggests that the relationship between the game player and the game is understood by the player in a rich set of contexts. For example, he discusses the literary relationship between the reader of a book and the characters in the story and compares it to the relationship between a player and a game, often experienced through one or more on screen characters. But Newman recognizes this construction is problematic in games. Following Ted Friedman's analysis of games that apparently lack a central narrative character, such as Civilization II or SimCity, Newman notes of player point of view: "Players see themselves as the whole screen." (Newman 2004, 137) This accounts for apparently characterless games, such as Tetris, but also of the phenomenon of identification between the player and an arcade racing game. Even though a player may sit inside a replica race car cockpit, on screen they may see a complete representation of the car they are driving and even experience cinematic artifacts during the race, such as lens flare, and still claim "first-hand experience of explicitly mediated representational gameworlds." (139) In other words, while the game presents a messy, and somewhat contradictory set of points of view—the player in the race car, the player watching the race car and the player filming the race car—these observed points of view merge in the player's experience into a single point of view, a specific relationship between the player and the game. Narrative

characters, then, simply add one more component to the game experience, an experience that the players can absorb as a totality. Leaving strong narrative characters out of a game no more damages the integrity of the game than it would to remove the color.

This leads Newman to consider the how the literature of the cyborg can provide additional insight. Research into the relationship of people to their tools and machines, especially within the science fiction framework of the cyborg, appears to provide a useful analytical frame for considering the question of players and their games. As science and science fiction considers how machines change our understanding of identity, Newman continue to emphasize how easily people, or at least gamers, accept the blurry lines between themselves and their games/machines. He even goes further to suggest that this relationship is far from a cerebral abstraction from the body. Rather, he argues:

“It is important, therefore, to avoid consideration of player interaction with characters as a cerebral or mere ephemeral experience. Indeed, videogame interactivity is a powerful experience precisely because it is so ‘bodily.’”
(141)

This leads to an interesting summary of the notion of point of view, of the relationship between the player and the game, inside the game. Namely, players see themselves inside the game through a variety of individual tactics—through on-screen characters they control, through the controllers and interfaces that they use and through the narratives they experience. But ultimately, the player’s point of view is always a gestalt, an attempt to reconcile their role as a player with the entire game system. And whether that is playing a space marine in Halo, an unseen mayor or city manager in SimCity or simply an invisible hand in Tetris, the player understands their role in terms of the game, not in terms of the specific narrative and structural devices handed to them.

But it would be too much to say that these specific devices do not matter. A first person cinematic perspective in a game signals a certain kind of relationship that a player can, and should, have with the game, in the same way a bird's eye view of a battlefield suggests another relationship to the game system entirely.

In this way, point of view becomes another key piece of the game machine and the various techniques for establishing point of view, and defining the relationship between the player and the game, remain an important piece of the game system design puzzle.

Point of view and place

A person's relationship to a place.

At first glance, the question of point of view in a real place seems easily answerable. It is either the specific point of view of a specific view in a specific place or it can be a designed vista or viewing point that a designer hopes to direct viewers toward in order to elicit a specific view. The first case is a potential notion of point of view and the second is an applied notion of point of view.

This basic notion of point of view is further cemented in the media of architectural design, which is often two-dimensional and forces the viewer to see the scene from a very specific point of view, at least in terms of the scene's rendering. In this context, point of view can also describe different rendering systems used to produce architectural drawings—including axonometric and multipoint perspective as well as plan and elevation.

Borrowing from the notion of videogame point of view, we can discover at least one other important form of architectural point of view, which is the narrative point of

view. A person may walk to a certain point in a cathedral to marvel at the scale and beauty of the building. But the relationship between the viewer and the building is also suggested by a narrative which places the viewer in a position of awe borrowed from the stories in the Bible and emphasized by the stain glassed stories in the hall.

Much like games, then, designed environments use a rich set of contexts, both material and narrative, to place the viewer in a specific role within that environment. In this way, the notion of point of view in games works equally well for material space.

And just as a game can use point of view to help engage a player in game, so can point of view in environment help accentuate a specific experience.

Theme parks structure their space and their attractions according to stories that inevitably define a visitor's point of view. Disneyland's Jungle Cruise provides a narrative framework, suggesting that visitors are now tourists deep in the jungles of Africa, as well as luring their visual point of view to specific scenes set along the way through use of set pieces and tour guide direction.

But theme park rides are not the only places that provide a deliberate narrative and visual point of view. Standing in front a plaque attached to a historical building, a patron might be reminded of some patriotic meaning associated with the building and suggests a sort of national pride, all the while pointing out a salient feature, such as a window some important figure used to peer out of long ago. Information, interface and point of view work together to produce this kind of specific effect. Or, to use a more notorious example, the window in the Dallas Book Depository that Lee Harvey Oswald used as a perch to fire at John F Kennedy, remains propped open. Now behind glass, the window still imaginatively invites visitors to peer from the sniper's vantage point and

imagine firing into the motorcade in Dealey Plaza.⁷ Once again, the narrative and the specific visual point of view combine to create a clear role for the visitor to play in the environmental scene.

Rewards and consequences

Incentives that motivate gameplay.

In their landmark study of early videogame behavior, Loftus and Loftus look at the question of psychological reinforcement in games. (Loftus and Loftus 1983) Their view holds that the fun of a playing a game, and in the case of their research, a videogame, finds its source in a set of psychological factors—reinforcement (rewarding behavior to increase its frequency), schedules of reinforcement (the frequency of reinforcement of a given behavior), extinction (the moment when the behavior ends because of factors such as reinforcement which not frequent enough), magnitude of reinforcement (the perceived size or value of the reinforcement), delay of reinforcement (the time between the behavior and the reinforcement), cognitive dissonance (unexpected behaviors that appear to contradict reinforcement theory) and regret (the power of failure avoidance as a class of reinforcement). This apparatus led them to an early description of videogames as a kind of “Skinner Box”. The Skinner Box has long stood as a pejorative term for any kind of behavior influence that appears to adhere to the operant conditioning of BF Skinner’s famous experiments. Game critics since Loftus and Loftus have continued to use the association to describe games designed closely along the lines of psychological notions of reinforcement.

⁷ Or, the website <http://www.earthcam.com/usa/texas/dallas/dealeyplaza/> provides access to a web camera placed in the notorious window providing “the ONLY LIVE view in the world available from the Sniper’s Perch.” Clearly, the fascination with architectural point of view is in force with this boast.

While this analysis provides out an interesting psychological description of why people play games, more important than the specifics of the analysis is the focus on the concept of rewards and consequences. Through their disciplinary lens Loftus and Loftus see a psychological grounding in the appeal of games. But the presence of rewards and consequences does not require a psychological description (although it certainly can support one). For example, rewards through a narrative interpretation might be looked at as an appropriate dénouement in a story, or the reveal of the murderer in a mystery. Or, in an example closely related to the nature of games, when designer Rob Humble ponders the possibility of free will in games as a philosophical counter point to the determinism of the Skinner Box perspective, he is really questioning the role of rewards and consequences. (See, for example, Humble's keynote speech at the University of California Santa Cruz's 2011 event, *Inventing the Future of Games*: <http://games.soe.ucsc.edu/future2011>). In Humble's view, where carefully tuned games seem able to predict player behavior through the use of well-placed systems of rewards and consequences, he suggests an ethical focus on games that require free will to play. At the center of his argument is an emphasis on open world, player-constructed worlds such as *Second Life*. Presumably, the rat cannot create his own Skinner Box. Humble challenges the notion that all games are Skinner Boxes, as Loftus and Loftus suggest. Rather Humble sees the question of rewards and consequences in games as something more complex. While a reward may be nothing more than reinforcement in a tightly controlled, operant conditioning model, a reward might also be a player-defined event or outcome, fluid and outside of the game designer's direct control. Following

Humble's line of inquiry, the nature of the rewards in a game should remain linked to the freedom of play.

In fact, this fits with Juul's notion of a game that is defined, at least in part, by the player's ability to set the value of the game's outcomes and, to some degree, negotiate the outcomes or consequences of the game as well.

The short form of his "classic game model" states:

"A game is a rule-based system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome, the player feels emotionally attached to the outcome and the consequences of the activity are negotiable." (Juul 2005, 36)

Most relevant to the discussion of rewards and consequences are three specific features out of the six that form his definition: valorization of outcome, player attached to the outcome and negotiable consequences.

By valorization of the outcome Juul means, "that some of the possible outcomes of the game are *better* than others." (40) So, in the simplest sense, winning is valorized over losing in almost all games. But Juul also accounts for the natural conflict in selecting from two positive outcomes—such as winning at all costs versus winning well—and also notes that positive outcomes are almost always more difficult to obtain than negative outcomes. In other words, it would be no fun to win a game where it is easier to win than to lose.

The notion of valorization of outcomes dovetails neatly into the broader concept of rewards and consequences by suggesting that games have an overarching value system that provides rewards—i.e., victory—to more difficult ends and even in cases where the player valorizes a specific outcome—such how you win, and just winning—leave the

basic concept intact. Games require a fundamental value system that provides a context for players to orient the relative value of rewards.

This makes sense in practice when you consider the difference in reward structures between winning a game through active contest versus winning through a forfeit. Although the extrinsic rewards may be identical, the intrinsic rewards of the player of winning through play are clearly greater. And this is a value structure established by the game, enforced by the players and enacted during play.

When Juul discusses how the player must be attached to the outcome, he means, “The emotional attachment of the player to the outcome.” (40) This point is the means by which Juul excludes the spoilsport from his model—the person who is unwilling to be happy if they win and unhappy if they lose, but simply plays the game mechanically. In terms of the notion of rewards and consequences, Juul’s point here can be read as to mean that players must perceive the rewards and consequences in the game as meaningful. If earning points, completing levels, defeating enemies or winning the game brings no joy and suffering defeat or watching the pinball drain at the bottom of the machine brings no sadness, then Juul would say that the person acting on the game is not playing and what they are performing is not a game in that instance.

In his third point, Juul discusses negotiable consequences as, “the fact that it (the game) can *optionally* be assigned real life consequences.” (41) This move is necessary for Juul to exclude things like war or Russian Roulette from the class of games. It is also informed by the notion that the consequences in games are usually harmless beyond bruised pride or a token exchange of money. When the rewards for winning are great—such as in the case of professional sports—we can say that a game is being played but

that the players themselves are actually experiencing something more along the likes of a professional activity like any other job.

Juul is clear to note that this negotiation of consequences can happen from day-to-day or from one play session to the next. By this, he suggests that the ultimate meaning of game, at least in terms of rewards and consequences, is a contingent negotiation between the players, and possibly between the players and the game. Games, then, must allow their players the freedom to construct ultimate meaning in terms of their value.

Rewards and consequences, following this analysis, become another key piece in the game machine's structure. Without rewards and consequences of some kind, whether intrinsically provided by the player, extrinsically defined by the game or provided by both, the game player lacks a motive. The question, "Why play a game?" always reduces in some sense to the question of rewards and consequence. And from a design perspective, providing opportunities for rewards and the challenge of consequence becomes a framework activity.

But important in this concept is that rewards must rise beyond simple reinforcement of behavior and consequences should be more than punishment. To rise above the context of the Skinner Box, a game must allow for the freedom of the player making choices inside the game system and making choices about what to value in the game and determining the real life consequences of the play.

Rewards and consequences and place

Incentives that motivate experience of a place.

Returning to the tale of the "Lady and the Tiger", the spatial representation of rewards and consequences is quite deliberate. Behind one door is a lady—the reward—

behind the other a tiger—the consequence. And while the narrative layer of the story allows for a greater range of interpretations about which door—the lady or the tiger—is the reward and which is the consequence, the stark representation of environmental reward and consequence remains a helpful illustration of the concept.

Spatial reward can be as common as a view, such as that promised at the end of an arduous hike up a mountain trail, or as unique as discovering a hidden feature in the landscape. Once again, Disney provides an excellent illustration of the notion of designed, discoverable environmental rewards in the form of the “Hidden Mickey”:

“(A) partial or complete image of Mickey Mouse that has been hidden by Disney’s Imagineers and artists in the designs of Disney attractions, hotels, restaurants and other areas. These images are designed to blend into their surroundings. Sharp-eyed visitors have the fun of finding them.” (Barrett 2009, 19)

The Hidden Mickey is a deliberate and designed form of environmental reward. The pleasure of walking and looking in the Disney environments has been interlaced with an activity that valorizes, to use Juul’s term, a certain attention to detail. This subtle scavenger hunt capitalizes on the is/is not of a reward that is explicitly designed into the physical environment to be seen, but is intentionally obscured as to remain unseen.

The notion of consequences, however, suffers a more difficult translation from game to place. Because while a game might put the player in the position of facing the consequence of the demise of all of humanity (if their space marine is unsuccessful in stopping an alien horde), real world places are unable to manage such a dire context and remain fun.

But there are some cases to demonstrate that environmental consequences are possible and more common than it might at first seem.

The haunted house works on a series of heavily narrative, but specifically spatial jeopardies—axe-wielding maniacs crossing corn fields, zombies stumbling around corners, vampires lurching out of the dark and more. The sets, the settings, the stories and the actors all borrow heavily from the movies, but these features raise the thrills in a predictably material manner. “(H) haunted houses deliver thrills straight up your spine because, unlike movies, they’re real. These monsters and psychos are right there, breathing down your neck, eye to bloodshot eye.” (Bannatyne 2011, 150)

In her book length survey of the American obsession the Halloween, Lesley Bannatyne finds no better example of the holiday’s tropes, traditions and trends than in the haunted house industry. Estimating at least 4,000 professional or semi-professional haunted attractions run each Halloween season in the US, and noting that many thousands of amateur haunted attractions add to the list, the idea of visiting a place specifically for the scares fits with the ideas of consequences. Whatever the other attractions that bring a visitor to a rural farm, downtown warehouse or school gymnasium made up like an insane asylum, people come to be scared.

And while Bannatyne notes that “(s)ometimes you really need a human” (156) to evoke the thrills that visitors expect, with people providing the shocks more than the place, she recognizes the importance of place in the creation of the effect. “Good Halloween is good theater. It excites the imagination, transports you to another time and place, and provides the kind of catharsis only a real, bloodcurdling scream can give.” (163)

Following this line of thought, Bannatyne suggests that the roots of the contemporary haunted attraction lie in the carnivals and freak shows of the previous

century. This lineage places the haunted house in the same pedigree as the carnival fun house, complete with the vertigo-inducing “barrel of fun” and shocking jets of air of the classic fun house.

Writing about one of the earliest forms of the fun house in the U.S., George Tilyou’s Steeplechase built in 1897, Steve Solomon notes,

“He wanted as much physical participation as possible, and a communal feel, like that of a fair or festival. Furthermore, a mild mortification was to be part of the proceedings. Being made a fool of could be great fun, he had discovered—as long as you got to watch the next person suffer the same insults, blast of air, or collapsing stairway.” (Solomon 1999)

Fun and consequences, in environmental scope and scale, have a tradition at least as old as the dawn of the previous century and have influenced our understanding and experience of fun places ever since.

Cultural context

The role of culture in and around games.

“Games are always played somewhere, by someone, for some reason or another. They exist, in other words, in a *context*, a surrounding cultural milieu.” (Salen and Zimmerman 2003, 503)

Whatever the specific definition of culture, games float as a cultural object in the greater cultural soup. Even though, as Huizinga and others have noted, animals play, the game seems to be a uniquely human activity. No animal appears to play quite the same way that people play, with the same earnest interest in the rules and the same understanding of how the game stands in place of unspoken cultural facts or aspirations. So, play may sit in a pre-cultural space. But games themselves remain cultural objects, both of and for culture.

Salen and Zimmerman's meta-formula for the study of games describes a rules-play-culture schema. Culture, then, is not just a backdrop context, a potentially confounding factor in the study of the game objects, but rather it is an essential ingredient in the game itself. They attempt to frame the question of culture with a few key questions:

“(W)hat contexts constitute the environment of a game? How do cultural contexts affect representation and game play? How do games, in turn, affect cultural contexts?”
(506)

Accordingly, their answers follow this line of questioning, looking at representation and cultural interaction. In one context, games function as a system of cultural representation. Rather than create culture, they merely reflect the cultural perceptions. As Salen and Zimmerman note, “In this case, the cultural dimensions of a game are part of the game itself, reflecting values and ideologies of surrounding contexts.” (507) Like any other product of culture, games embody the culture in one sense or another. As a result, understanding games requires an understanding of the cultural reflections they provide.

This is an essential point when attempting to “read” games. Is the selection of a female hero in the “Tomb Raider” series an arbitrary choice? Is Lara Croft simply one of an almost limitless number of game pieces that could be substituted into the central role of the game? Obviously not and the series stands as an important landmark in the videogame landscape largely because the game acknowledged the bias and benefit of choosing a heroine in a typically male-dominated game genre. The game's representation of specific cultural attitudes animates its core and provides its appeal. As Salen and

Zimmerman note, “Since all games can be considered culture, any game you create will have cultural qualities.” (508)

Further, they argue that an interrogation of a game’s cultural content is a legitimate method for understanding and designing games. “Investigating the cultural identity of a game is simply another way for game designers to generate successful play experiences.”

The mechanism of cultural representation also anchors the game experience. Because the game is not a *tablua rasa* of design, culture acts as an anchor to the game machine. That is, the game machine always works inside of a cultural system. However, Salen and Zimmerman are clear that cultural representation, as important as it might be, is not the only cultural interplay between the game machine and the societal system that surrounds it.

As interactive systems, “games offer players forms of participation that extend the boundaries of play *beyond* the edges of the magic circle.” (507). Considering Salen and Zimmerman’s construction of the magic circle as the conceptual and formal boundary of a game, the notion of a game as a culturally interactive system simply notes the power of the game to transform culture outside of itself, through the means of the game system itself. Other cultural forms, such as literature, also have a transformative power, of course. What is unique to games is how the players, and not just the designers, can participate in this transformation.

What they term as “transformative play” is the game system as a feedback mechanism into culture itself. And while they argue for a more socially-oriented application of the concept, the observation that games can create culture, or at least

influence it, goes some length toward explaining ongoing efforts to censor or control game content. As a contemporary cultural artifact, the game may not have the same social presence as other cultural functions, such as religion and government. But the presence of games does suggest some sort of social vector, a machine at work transforming the context in which it resides.

In this light, the game machine is both a mirror of culture and a tool for change. The ambiguity created by the game may, in this line of thinking, be a side effect of a more essential role for games, as a mechanism for cultural evolution. This certainly would provide a fitting rationale for the current interest in games to teach and the gamification movement, which seeks to put games to deliberate use in everything from training to incentivizing industrial production and mass market consumption.

Cultural context and place

The role of culture in and around fun places.

Just as games act as cultural objects, even though play itself remains self-evidently pre-cultural, so does architecture separate itself from mere building. In both cases, the presence of culture gives shape to games and to architecture and provides them a necessary context within which to exist. Without culture, games return to raw play and architecture to simple building.

The role of culture in games and architecture provides an important interpretive context for the study of fun places. It suggests that the system of games is a social creation, situated inside a culture from a historical perspective, though current practice and via a teleological becoming. Games as a system of fun must respond to historical interpretation, current meaning and participate in future meaning making. We can say the

same thing of architecture. It sits inside a powerful historical context, both in terms of referent and interpretative context and reference model, provides a reinforcement of the current culture and a palette for reinterpreting the future.

Games and architecture fit smoothly into this model for the reason that they both appear to fulfill a similar cultural role, if not a similar function—as a current context for interpretation based in the past and a method for interrogating the future and reinventing the present. This is the transformative role that Salen and Zimmerman describe in games and matches Albert Smith’s notion of the architectural model as “thinking machines”. In both cases the system, whether of a games or of architecture, can fill the function of helping its user understand the past and present as well as conceptualize and shape the future.

In addition to the transformative potentials of games and architecture is the more direct representational role Salen and Zimmerman described. Culture demands of its objects and the objects respond. Just as architecture cannot be anything but always must respond to its culture, so too with games.

This is both limiting and freeing. The limiting factor is obvious. Because the culture is the milieu, as Salen and Zimmerman note, no cultural object can fully transcend its culture. It is freeing because it suggest that that there is no natural limit to either architecture or games. As culture develops games and architecture does too. This is where games, and architecture, both fulfill a reference role for culture.

Together, the transformative and representational relationships between culture and games/architecture provide a key aspect of the success of both systems. Because culture is malleable, it is subject to influence from the objects it supports. Within the

context of games, this is what drives Salen and Zimmerman to suggest that some games can transform culture. Games, as an interactive object, provide the opportunity for transformation of culture. But this transformation is grounded in a specific representation.

How this transformation of culture works in the context of games as machines for generating fun, Salen and Zimmerman do not say. So, in terms of culture and games as a part of the analytical framework developed here, any role that fun and games might have in the evolution of culture can be set aside. If fun is a social function, paralleling Sutton-Smith's argument that play is an evolutionary trait, and then the study of architecture as a fun machine only becomes more meaningful.

Gameplay

The summative act of a player engaged with a game

Like the notion of games themselves, gameplay is a concept with a nebulous center and an ambiguous perimeter. Andrew Rolling and Ernest Adams account for this difficulty in the definition of gameplay in the nature of games themselves: "Gameplay is so difficult to define because there is no single entity that we can point to and say, 'There! That's the gameplay'. Gameplay is the result of a large number of contributing elements." (Rollings and Adams 2003, 199)

Just as important, Rollings and Adams clearly point out that the specific combination of elements does not matter as long as a player has a successful experience with the game.

In other words, gameplay is the summative whole of the functioning game machine. A game which successfully produces the experience of fun can be said to embody gameplay. This explains the somewhat contradictory definition of gameplay in

“The Videogame Journalism Style Guide” as “The experience of interacting with a game” followed by the clarification, “Gameplay is a quality of the game rather than of the player.” (Thomas, Orland, and Steinberg 2007, 33) The game itself contains the structural features that allow the system to function successfully. But the player is the catalyst that brings the gameplay into reality. Thus, gameplay is a property of the game as much as fun is the property of the player’s experience.

Gameplay then, describes the game machine as a whole. The game is the mechanical object, decomposable into individual parts. The gameplay only exists when the game system as a whole functions in its role to produce fun for the player.

Gameplay and place

The summative act of a visitor engaged with a fun place.

Not surprisingly, the language of place lacks an equivalent term for gameplay. And gameplay seems inadequate to describe places. Steffen Walz in, “Toward a Ludic Architecture: The Space of Play and Game” invents the neologism “playce”, a portmanteau of play and place, as the environmental equivalent to gameplay. (Walz, 1)

This research has proposed its own term, *ludus loci*, a play on the architectural term *genius loci*, and translating into “play of the place”.

Whatever the actual term, the idea that a place must function as a complete system to create fun in the person experiencing the place is key.

As this initial review of the possible terms suggests, rarely, if ever, is a game system built from a single element. And while theorists might disagree which elements are necessary and sufficient to erect a successful game system, there is a widespread agreement that there is some minimal combination of atomic elements required to create

a minimally functioning game machine. Likewise, a fun place must combine some minimal number of elements to create a functional play place. Thus attempts to suggest that a place with a story or simply break from formal building norms is enough to create fun are incomplete. A visit to these supposed fun places often shows a single formal gesture—an unusual color or pitch of the roof—masking a very traditional organization and construction throughout the rest of the building or a storyline that seems almost incidental to the place. This results, inevitably, in a letdown for anyone who guessed that they were about to encounter a functioning play system with a lively *ludus loci*.

Commercial façades with strong narrative covering conventional big box shopping experiences, tales of haunting of otherwise ordinary homes and landscapes that visually promise exciting exploration, only to present chained paths, are all archetypes of failed play places.

The lack of an accepted architectural term to mirror gameplay casts light on the central defect in architectural dialog's ability to talk about fun. In other words, lacking a concept, however loose, ambiguous or nebulous, to describe a functioning play place, hobbles our ability to see, understand or design these places.

Disneyland, by default, becomes the model reference for a play place, and its particular vocabulary—from cast members to “on stage” and “off stage”, for example—dominates unnecessarily the discussion of fun places. “Disney” becomes the placebo term for gameplay.

Whether “playce”, “*ludus loci*”, “play place” or some other term gains recognition and the force of cultural usage, so should the standing of these game-like system in human environment.

Synthesis/Conclusions

While a game can be considered a machine for generating fun, rarely, if ever, is a physical environment exclusively dedicated to the generation of fun. Even a theme park, an obvious example of a place designed for fun, also serves other ends—such as generating profit as a commercial enterprise. This points to a potential issue in translating the language of games to the analysis of place. Namely, considering a place the same type of machine as a game could lead to a theoretical reduction that fails to capture the complexity of human environment.

Implicit, then, in this method of analyzing fun places is the idea of borrowing terms, but not imposing the entire system of game analysis on place. This allows the flexibility to view a place in terms of its potentials for supporting or generating fun, from theme parks and gambling casinos that make a clear effort to produce fun all the way to small, amusing flourishes of a building's design that wink at the idea of fun. Michael Grave's caryatids in the form of Snow White's seven dwarves on the Michael Eisner Building in Burbank, California offer an example. This playful gesture helps signal the kind of business contained in the headquarters of the Disney Company. But it is only a gesture that does not otherwise diminish the building's role as a corporate headquarters. Unlike a game, a building can serve other purposes, so fun embellishments are possible. Between the failed play place and the encompassing place as a game falls a range of architecture working on different registers in the composition of fun.

Likewise, reducing a place to an analysis of narrative risks the same thing—namely, assuming that narrative is a sufficient method for describing, or designing, the system of fun embodied in a place.

An understanding of the system of fun in games and place, as suggested in this review of game elements, demands the application of a system of analysis.

What makes a place fun?

This collection of terms promises to help answer the questions about the relationship between fun and place, but stops short of providing a systematic formula for determining that answer in all cases, if it is possible at all. The question, “What makes one game better than another?” relies upon a critical vocabulary of game terms, but never assumes there is one perfect form of game that all other games must adhere too. As Thomas suggests,

“For videogames to actually grow as an expressive art form and reach beyond the status of toy products built as simple diversions and recognize their full potential as a renowned creative and aesthetic pursuit, people need to talk about them differently.”(Thomas, Orland, and Steinberg 2007, 99)

In other words, the act of answering questions about the relative success or meaning of the game machine remains a dialog, an argument and a conversation. Critical vocabulary terms are simply tools for fueling that conversation and allowing it to make more precise arguments.

Likewise when we build a critical vocabulary of fun places, the vocabulary is much less a general recipe and more a set of key ingredients that continue to recombine in interesting and successful formulations. This point is important because the close analysis of the critical terms relating to games risks the danger of assuming that the terms themselves provide an atomistic tool for dissecting games. In fact, as this survey has shown, the use of each term when considered in the context of the game as a machine for

generating fun cannot stand alone. Even concepts as fundamental as “rule” or “narrative” do not fully describe the potential of a functioning game machine.

Further, this review of game terms is not meant to replace the vocabulary of environment or the language of architectural criticism. Instead, these game terms are introduced as a means to better situate the concept of fun inside of the environmental disciplines, to provide a connecting grammar between the language of place and the language of fun. In that sense, “rules” do not replace “masses” any more than “players” replaces “viewers.” But seen inside the discourse of fun places, rules may play out as masses and players may sometimes fulfill the role of the viewer.

The borrowing and interpretation of terms from games to environment promises to provide a method for describing and analyzing places as systems for generating fun. Just as a game can be viewed as a machine for generating fun, so can places. Whether these places have been designed from the beginning as fun places, have been converted to fun uses over time or, simply, have emerged through social practice as a place for fun, the argument here is that all of these places share common characteristics. Much as the diversity of games does not diminish under the observation that games share common characteristics or the argument that games succeed on a common criteria, so we can make similar claims about place.

V. CASE STUDIES

The Fun House in Action

Finding fun places is easy. Understanding why they are fun is the challenge. This research argues that folly has provided a convenient category for orthodox architectural history and theory to set things aside in, and that some notion of fun lies at the definitional root of this category. Further, I have made the claim that games as systems for creating fun remain the best model machine for examining and thinking about architectural fun.

What remains is to provide an application of this method of understanding follies and other fun places. This chapter provides a selection of sites and architectural representations of homes in America and asks, “What makes these places fun?”

In search of an answer to this question, these case studies do not aim for any sort of descriptive completeness. Rather, each case is a sketch meant to illustrate how the vocabulary of fun abstracted from games can provide insight into the attractive power of the fun house, whether seen as a historical folly, a contemporary folly, a commercial theme park or part of a retail strategy. Lining up various visions of a more entertaining take on domesticity, these examples demonstrate how fun, and specially the vocabulary of fun, can be used to better understand the fun function in human environment.

Home and Work

If the opposite end of work is play, as is suggested in the old children’s rhyme, “All work and no play makes Jack a dull boy,” then the cultural middle point between work and play in contemporary American might be placed in the home. While a growing

number of people have, in the traditional domestic model, returned to “work at home,” most Americans still leave the house in the morning to labor and return in the evening to relax. The idea of working at home still sounds exotic and is often treated as a benefit to the worker—as in, it’s not really work to work at home. On the other hand, the home remains the site for much domestic labor. Thus, our homes are not simply retreats from work. So, while we spend much leisure time at home, the desire to leave the house to “have fun”, remains the primary driver for the fascination with shopping malls and vacation destinations, city parks and cinematic megaplexes.

When searching for a specific set of case studies to test notions of buildings as fun machines, the American home seems ideal. Not only does America provide an ample number of domestic follies ready to be examined as fun machines, the not work/not leisure site and work/leisure construction of the home provides an appealing locus of ambiguity natural descriptions of fun.

So, while a more comprehensive set of cases would include work sites as well as leisure sites, the use of the domestic as a central theme in organizing these preliminary cases to bear out the value of the rhetorical method described in this research, seems practical.

The Winchester Mystery House

The Fun House as Narrative

Whatever drove Sarah Winchester west from her home in Connecticut in the late 1800s, it seems doubtful her intention was to create what Gwyn Headley generously calls “a folly to define follies”. As he wrote in his catalog of the American folly, “The

Winchester Mystery House, a mansion now surrounded by suburbia, is the finest folly house in America....” (Headley 1996, 121)

The 160 room wooden mansion rambles across a six acre lot and once sat in the center of a large farm. The widowed Winchester had left the East and come to California with her sisters seeking a new start. The original home on the property was purchased in 1886 and she dubbed her new home “Llanada Villa.” For the next 20 years, while her country retreat would not be her only or even primary residence, it remained an architectural pet project, constantly growing and evolving. As historian Mary Jo Ignoffo summed in her book-length biography of the Winchester heiress:

“Winchester’s manor was Victorian, which by definition defies precise parameters. Primarily Queen Anne in architectural style, it showed Eastlake and Stick elements, although a glimmer of Gothic and a taste of Romanesque appear now and then. It is asymmetrical, another typically Victorian feature and not surprising since it was constructed and altered over a twenty-year period.”(Ignoffo 2010, 110)

Although major construction on the home stopped in 1906 after the massive San Francisco earthquake, the home would continue to attract interest long after Winchester’s death in 1922. A series of land deals divided up the Llanada estate, leaving the old house up for sale. Early roller coaster pioneer John Brown arranged to lease the property from the trust company and quickly set about transforming Winchester’s architectural experiment into the roadside attraction it has remained ever since. As Ignoffo laments:

“The Winchester Mystery House has emerged as a major California tourist destination....As the house has become more well known, the person of Sarah Winchester has receded further and further from reality, her life story obscured by a highly successful advertising campaign.” (xiii)

Since her death, stories of Winchester’s insatiable building to forestall her own death and to assuage the angry spirits of those killed at the barrel of a Winchester repeating rifle, tales and rumors of her nightly séances and ghost-confounding “stairs to

nowhere”, trap doors, trick panels and doors that open to nothing but a drop to the ground have replaced that historical Winchester. Ignoffo’s researched portrait of the heiress debunks the vast majority of the more fanciful claims about Winchester and her villa. But the stories have proved more enduring than the facts and the Winchester Mystery House has settled in as the old home’s identity.

Paradoxically, then, the Winchester’s mansion is now presented through an interpretation of a haunted eccentric desperately trying to evade her family’s ghosts. But that narrative is structured on an almost entirely fictional version of the real Sarah Winchester. With all buildings, interpretation always finds some anchor in history—whether through the lens of the designer and builder’s intentions, the lives of the owners and occupants or simply in the context of the times. In the case of the Winchester house, the break from authentic history provides much of the appeal for visitors who flock to the sprawling home in search of something more exotic than the wealth of another era on display. Arguably, visitors come to visit not a home, but a fun house. What they are given is a fascinating tall tale.

Marketed as a “mystery house” and described as a mansion, the site is home to both a structure and a narrative. Truth and fiction, fact and speculation readily mix, each supporting the other. Regular tours through the largely empty building are tightly scripted to preserve the historically counter-factual narrative, and to imbibe the architecture with gothic tale of guilt, madness and ghosts.

“You can ask me how, you can what, you can when, you can ask me where. You just can’t ask me a question that includes the word ‘why’,” warns the tour guide as the group of ticket holder is ushered into the building.⁸

When convenient narrative will not provide a ready context, the meta-narrative of a “mystery house” rushes in to fill the gaps.

As the mystery narrative of the Winchester Mansion goes, no one knows why the house was built or what motivated the architect, Sarah Winchester. The tour guides explains that the heiress scribbled plans on napkins and assorted papers, only to burn them once the construction was completed. The mystery, guests are presumed to assume, is the house itself. Marveling at its oddities and eccentricities should suffice. So rather than appreciate the architecture for its beauty, visitors are asked to bask in its unusualness. Key here is that the architecture of the building gains meaning not through traditional forms of aesthetic apprehension, but through the constructed spectacle of the home. A narrative has been spun to support this perception and seeks to reinforce itself through the structure of the home. Like a magician on the stage, you are asked not to look too closely, unless you discover the mechanics behind the trick and ruin the illusion.

And this narrative sleight of hand is intentional. Whether the tour guide remains unaware of the historical material on hand that refutes many, if not most of the more interesting claims about Winchester’s house, they certainly should appreciate the irony of a tour that spends an hour explaining *why* Sara Winchester did many of the things in the building. Guest may not ask why, but the guides are free to tell the pre-scripted story of why.

⁸ All tour detail was collected during a visit to the Winchester Mystery House in March, 2011.

The tour itself, the primary vehicle for the construction and telling of the Mystery House narrative, consists of a winding 1-mile stroll through the sprawling edifice, filled with stories, tales, recollections and named features that evoke and help further define the mystery.

Some of the more prominent features include a set of stairs that dead end into a ceiling and a door that opens precipitously from the second story to the ground below. In both cases, the guide insinuates that these were designed features intended to confuse the ghosts of long dead Indians, murdered by Winchester-toting cowboys and soldiers. When the earthquake of 1906 is mentioned, it is used to tell other tales of Winchester's foreboding and doom about her own mortality. It is never used, as Ignoffo has pointed out, as the explanation for many of the more clumsy features of the house. After the earthquake, the house was seriously damaged, and much of the repair work consisted of stabilizing and sealing off damaged areas, leaving stairs to rooms that no longer existed and doors opening to portions of the home that had collapsed and were subsequently razed.

Likewise the arrival in the "séance room" works to expand the spectral narrative, flying in the face of facts. As visitors are huddled into the small room above the kitchen, the tour guide points out a secret door leading out of the room and a series of 13 hooks on the wall. The guide continues, ominously describing the secrecy and sanctity of the room, pointing out its various security features, including bars over one window to prevent servants from sneaking in. After spinning tales of late night, secret and solo communions, the guide then proceeds to say exactly what Winchester did each night, down to detailing the purposes of the 13 different hooks to hold 13 different colored cloaks.

Beyond the obvious contradiction in the narrative between the secrecy afforded this inner sanctum and the volume of detail the guide readily shared with the tour group, the historical facts fails to comply with the tale. To Ignoffo's historical eye, there was no evidence that Winchester participated in the various spiritualist movements of the time, and casts great doubt on the idea that she would have conducted séances, private or otherwise. Further, Ignoffo points to interviews with various Winchester employees who claim that some of the more nefarious features of Winchester home were added after the widow's death.

As a clear example of this point, Ignoffo points the chandelier in the building's ballroom. According to the tour guide script, the ballroom features a 13th candle in the elaborate lighting fixture to appease Winchester's occult fascination with the number 13. To Ignoffo, the 13th candle was clearly a crude addition made later to enhance the attractiveness of the tourist trap.

While noting that no mention of Winchester's obsession with the number 13 is made until 1929—seven years after her death—Ignoffo goes on to point out the absurdity that this wealthy woman would clumsily solder on an additional element to a fine piece of furniture.

“One thing is certain, Sarah Winchester's lengthy history of choosing and having made impeccable pieces for her house would never have allowed for a beautiful chandelier imported from Germany and hung in the great ballroom to be so poorly amended to include a thirteenth candle. If she had wished to add a thirteenth candle, she would have had it accomplished with precise workmanship or even as a part of a custom design, and it would not look, as it does today, as if it were added by a stage crew.” (209)

This paradigm of the “truth” and the “fiction” might relate to any tourist site, and even to any building, as stories blend into the context of the material form. In the case of the Winchester home, the narrative's themselves are intentional reinventions designed to

attract visitors. As Ignoffo aptly notes, “The mysterious and the promise of an eerie spectral presence are quantifiable in dollars if not in matter.” (213) The Winchester home could be considered a folly on its own terms, and sparks some of the fun implicit in all forms of folly. As the Mystery House, the home has certainly has been clearly transformed into a deliberate fun house through the instrument of narrative. These narratives anchor the Winchester House as an attraction. The building itself is not left to speak for itself. Rather, stories have grown up around the structure providing it a new life, well beyond the material and historical facts. If a ghost haunts the Winchester Mystery House, it is these stories.

And so visitors flock by the thousands each year to tour the house, to peer up the dead-end stair case and out through the door to nowhere. At each turn, tour participants attempt to play in the narrative, imaging what the spirit-obsessed old lady might have been thinking as she tottered through her mazelike home.

Of course, this narrative has no plot. So the tour ends with a shrug. After an hour and a mile of walking, the mystery remains and the visit concludes. Even if you pay for a special “behind the scenes” bonus tour, the visitor is no closer to understanding the mystery of the house or of Sarah Winchester. Like MacCannell’s tourist, the visitor leaves unsatisfied, missing the promised moment of authenticity.

On face value, this points to the Mystery House as a classic form of the tourist destination, the tourist trap, and suggests that that this is not a fun place at all. But looked at through the framework of games, it becomes clear that the Winchester site is actually a fun place straining against its tourist trap trappings.

The house promises fun in a very deliberate way. A 160 room home contradicts most common notions of domestic need and even of extravagance. This ambiguity is amplified by stories that Winchester lived alone, wandering the sprawling collection of rooms like a ghost herself. Similar to a novelty giant pencil or the world's biggest ball of twine, the Mystery House works because it is an outsized version of a home. In this way, the home appears to mimic, in comic scale, what a home should be. Tours of the house spice this material fact with claims that Winchester never slept in the same room two nights in a row—emphasizing either her eccentricity or wealth or both.

In this way, Winchester's construction becomes a home that is not a home—a residence where she lived, but lived outside the normal expectations for how someone should program, and use, a house. So too with the extensive luxuries in the house. Tours of famous homes have long fascinated visitors with displays of how “the other half lives.” And regionally, The Winchester house has an opulent other in the Hearst Castle. But where Hearst delights visitors with visions of the kind of luxurious home life one can obtain with massive wealth, Winchester's fortune seems to have been squandered in an obsessive accumulation of architectural forms. While the Hearst Castle makes appearances in the key inventories of American follies (Lancaster 1960; Headley 1996), these collections avoid classing Hearst's San Simeon as a folly on the order of the Winchester Mansion. Further, it seems somewhat unfair to talk of Hearst's grand project as folly when other homes of exaggerated opulence, such as the Biltmore Estate, equal, if not surpass their Californian cousin.

At work in these definitions of homes at fabulous scale is the careful selection of wealth-as-aesthetic from wealth-as-parody. In the case of the Biltmore, the gargantuan

manor works under the guise of wealth-as-aesthetic, and casts George Vanderbilt into the role of tasteful aristocrat who hired the best in architects and furnished his home with finest things. Compare the Biltmore to Winchester's almost modest (in comparison) Llanada Villa. But where the Biltmore connected to traditional aesthetics and taste, avoiding the broad brush of the folly and the Hearst Castle flirted with culture through its massive collections thus ending up a marginal case for the folly files, Winchester's building did not meet the same fate. Whether driven by ghosts or grief, Winchester grew her out-sized home from a point outside of the traditional aesthetic frame and ended up in the context of wealth-as-parody. Where the Biltmore is a statement of wealth, power and beauty, and the Heart Castle fits, although not squarely, in the folly category, the Winchester House remains outside, something used to define the category

Woven into the story of the haunted widow constantly building to assuage her guilt and confound her demons, the Mystery House also promises not just domestic contradiction in scale, but in organization. Over and over, tour guides and brochures refer to the "maze-like" structure of the building. While the normal American home would be built for convenience, efficiency or to impress guests, the Winchester home is presented as an inexplicable collection of abutted, co-joined, overlapping and intentionally puzzling jumble of spaces. Tours of the home work to emphasize the visitor's disorientation. The path of the tour winds in serpentine fashion through the home, disorienting visitors further with each turn through the largely un-decorated house. The tour itself seems designed to create a feeling of vertigo in a building already predisposed to disorientation. At a key point in the tour, the guide points to a wood column and waits for someone in the group to identify the incongruity. The column, it appears, was installed upside down.

“Who knows why Mrs. Winchester wanted them that way,” the guide shrugs, content to leave the disorienting feature to puzzle the visitors. Then, before the rational mind can sort out of the incongruity with a plausible explanation, the tour guide continues:

“But before you think that this was just an accident, look out of those windows.” Pointing to a porch visible a few feet in the distance, “All of the columns in the house were placed upside down!”

From this basis in ilinx and mimicry, the owners of the Winchester Mystery House have spun a narrative based in equal parts rumors from Winchester’s era with updated spiritualism and ghost stories suitable to a road side attraction. The marketing of the attraction mirrors this structure.

“Winchester Mystery House™ is an extravagant maze of Victorian craftsmanship – marvelous, baffling, and eerily eccentric, to say the least. Tour guides must warn people not to stray from the group or they could be lost for hours!” the attraction’s website boasts. (*The House* 2011) In this marketing language the two primary themes of play feature prominently. First, there is the notion of the house as a maze, reiterating the ilinx of the structure. Second, it extols the out of scale mimicry of a home. The Winchester Mystery House, the marketing makes clear, is a house that is also a maze, it is a home of such immense size as to cease to function as a home (but, of course, it was a home!). The Mystery House is and is not a home, and the visitor’s mind turns to play.

Not surprising then, the Mystery House attraction focuses on some of the key elements that make the Winchester House both a folly and a fun house. But beyond its unresolved narrative trappings, its intentional ilinx and out of scale mimicry of the

traditional notion of a home, does the Winchester home offer additional opportunities or anchors for fun?

Standard tours through the mansion limit participant interaction to “follow the guide”, “ask questions” and “look around in the current room”. Since the home features little furnishing, the majority of the tour is spent standing in drafty, and quite empty rooms, listening to the guide’s canned monologue. And while the tour spiel attempts to engage the visitor in the space through constant references to potentially disorienting twists and turns through the large home, tale after tale of eccentric excess of the lonely doweress who somehow made this strange and haunting place her home as well as careful attention to the necessary elements of the Winchester ghost story plot, the tour group easily grows restless over the hour of the exploration. The Winchester House and accompanying narratives may make for fun, but the tour largely does not.

Perhaps in recognition of this, the Mystery House owners sponsor two somewhat more interactive events during the year, “Flashlight Tours” and “Fright Nights.”

The marketing material for the flashlight tours explains:

“Special 65 minute Flashlight Tours of the Winchester Mansion are given every Friday the 13th and at Halloween. You'll tour the rambling, mysterious mansion at night with only the moonlight, a souvenir flashlight, and your imagination to provide illumination through the bewildering maze of rooms and stairways. But watch your back, Sarah could be waiting around any turn. This is one open house you'll never forget.”(*Special Events* 2011)

With the addition of a flashlight to the tour’s limited repertoire of visitor interactions, the Mystery House promises to accentuate both the ghost narrative and the ilinx of the house. Of course, aiming a flashing in a dark room provides little meaningful new action for the visitor. Especially when compared with the popular “Fight Night” events:

“Winchester Mystery House™ Fright Nights is a special ticketed event at one of the world's most haunted places. On select nights in September and October the grounds of the Winchester Estate are transformed into San Jose's most terrifying Halloween experience, filled with haunted walk-through attractions, intense scares, roaming scare performers, and nightmare inducing tales.

“Remember we do not build haunted houses...we are one!”(*Fright Nights* 2011)

Following the script for a standard Halloween haunted house, the Winchester attraction leans heavily on the pre-established narrative and sense of ilinx. Now visitors are given the interactive responsibility of navigating the attraction, and provided at least some sense of interactive autonomy. The notion of the “roaming scare performer” indicates that the event will respond, in some measure, to the participants' willingness and ability to play a part in the show. This layers new levels of mimicry or play acting on the part of the guest, all built on the well established narrative and structural characteristics of the mansion.

Even more interesting is the notion that the Wincher House is a real haunted house. In terms of rewards and consequences, the promise of a Halloween haunted house is always a form of—this is a house that is not a house populated by demons and monsters that are not demons and monsters. The scares all feel real, but the consequences are all blunted.

For the Mystery House, the rhetoric of the haunted house attraction is in full force, but featuring a kind of one-upmanship familiar on the Midway. Rather than suggest that guests will encounter real ghosts and face chilling supernatural consequences, the Mystery House's management seems to admit that it's all a ruse. No haunted house attraction would be any fun if it was really haunted. And the Wincher

attraction's management appears to understand that. Their Halloween attraction promises fun, not real terror.

So what of the Winchester home itself? A folly? A fun house?

In terms of the structure itself, the “maze-like” qualities seem the most unusual or distinctive feature of the home. Even subtracting the oddities introduced in the aftermath of the 1906 earthquake, and the organization of the house, at best, seems ad hoc. But in almost any other context, the ad hoc, perhaps organic, nature of the structure would not earn it the label “folly”. The rambling room-after-room construction of the Taos Pueblo, for instance, might be considered vernacular, but not folly.

The scale of the home also presents itself as a characteristic feature of the Winchester home as folly. And certainly, a 160 room abode for an individual, her live-in niece and a handful of staff seems excessive. Without dismissing the size and complexity of the Winchester project, Ignoffo does put the project into an appropriate context. “Was she alone in this endeavor, or were there others undertaking similar projects? In fact, other women were creating houses that were on the same scale and with very similar oddities.”(112). However, the examples Ignoffo uses—Elizabeth Colt’s home in Hartford, Connecticut, the Haas-Lilenthal house in San Francisco or the Hayes Mansion in San Jose, California— show that Winchester’s interest in mansion-building was not particularly unique among the wealthy women of her age and these additional homes do not merit reference in the annals of American folly. So neither the casual complexity nor the scale of the home seem enough to earn the home a place in the center of the definition of American follies, as Headley has placed it.

What this leaves is the narrative, largely invented, to drive the designation of the Winchester home, the Mystery House, as a true example of an American folly home. This is not to dismiss the home as something unique, nor the power of this particular narrative. Thousands of people come from all over the world each year to visit this site. And it is the particulars of this building, its material facts, as well as the force of the narrative that bring the visitors.

Because the narrative that surrounds this site is constructed almost entirely from the whole cloth of the carnival side-show, it is tempting to dismiss it. However, dismissing this form of narrative would actually suggest that it has the power to transform a site into something that it is not. If this was the case, one could imagine a world filled with countless buildings carrying fantastic narratives designed to attract visitors and warrant a ticket fee. Instead, the tourist site itself is built from a narrative attached to a place in some fundamentally geographic or architectural fashion. People will visit the home of some deceased celebrity more readily than sojourn to their birth place. One site seems incidental to their legend—the place of birth—the other an important locale in which to situate the narrative of celebrity. This comparison can be easily seen in the relative interest in Graceland, the home of Elvis Presley versus the restored persevered shack in which he was born.

The narrative placed on the Winchester home may be fabricated, but it is not insensitive to its site. The story emphasizes the home's organizational complexity and scale. Rather than put this more prosaic terms, it embellishes the material facts with fanciful ghost stories. And whether or not a staircase to the ceiling was the result of a quick repair job after an earthquake rather than as a trap for wayward Indian ghosts, the

fact remains—a staircase to nowhere is an extraordinary feature. Visitors huddle into the small stairwell to see this feature. The why is less important than the fact that it exists. The narrative comes in behind and captures this fascination, turning it into something portable and possible to communicate. No pitch to visit the Winchester Mystery House fails to mention this staircase.

The narrative becomes a form of intentional fiction that plays with the physical Winchester house and the more factual Winchester history. This narrative of place, like the narrative in games, serves to provide fun. The resulting contradictions inside the narrative and between the narrative and place, do not destroy the value of the story, rather they strengthen it. When the tour guide points to a furtive image of the elderly Winchester, apparently shot discretely from the road, and claims, “This is the only known picture of Sarah Winchester!”, it is worth noting that books in the Mystery House gift shop contain all sorts of images of the widow. The tour guide’s spiel is a story and is best appreciated as stage work. The moment that the visitors think of the guide as a lecturing in history is the moment that the is/is not collapses into fraud. The point of the Winchester Mystery House back story is not to be seen as history, but as to be pleasantly plausible. It must be neither so believable as to eliminate solid doubt nor so extraordinary as to forbid belief. When this delicate formula of ambiguity collapses the fun of the folly, of the Mystery House, disappears.

The control over the Mystery House narrative seems necessary if you consider it, rather than the actual building, as the source of the fun and therefore key to the commercial attraction. Threats to the narrative, whether through more clear-headed

historical narratives or simply by allowing visitors to roam throughout the house without a guide, are necessarily excluded,

But considered through the lens of the narratology versus ludology dichotomy in games, and its ultimate resolution in more synthetic ideas of games as “half-real” systems of narrative exploration, it seems worth considering whether the Winchester Mystery House would do well to find new methods for visitors to become site participants. Rather than challenging the narrative through interaction, the visitor as player would enliven the narrative, heightening the ambiguities between the facts and the story. As it stands, the Winchester Mystery House narrative invites disappointment, as the story replaces experience and the visitor leaves empty handed.

Bishop Castle

The Fun House as Playground

/

American’s have a special fascination with the castle, especially the image of the medieval form from the Old World.

A European symbol of domination and feudal history, in America the castle has become the site for fairy tales and fantasy, a point of attraction and attention. Sleeping Beauty’s Castle, in the Disney theme parks, provides an iconic image of the American castle and for one of the United State’s most iconic entertainment companies. Sitting near the center of Disneyland, the original Sleeping Beauty Castle was designed as a “weenie”(as Walt Disney liked to call it) attracting visitors down the Town Square’s Main Street promenade and into park’s Central Plaza, where visitors would whisk themselves off to Disney’s many lands. This central role in the park’s physical organization soon led to the castle taking a central role as a sign signifying the park itself.

“Ultimately, there’s been no building more indispensable to Disneyland’s image and history than Sleeping Beauty’s Castle.” (Strodder 2008, 379)

The Disney castle was inspired, in turn, by that great European folly, Neuschwanstein. Begun in 1869 and completed roughly 17 years later, the theatrical castle was the last major project undertaken by its creator, King Ludwig II. Referred to as “The Mad King Ludwig”, the castle was built at great cost and generated enormous debt for the king, who was eventually deposed as insane. The castle was never built as a political or military stronghold. Rather, it was designed as a home and set for Ludwig’s long interest in the arts and theater, especially Wagnerian opera. Clay Lancaster uses it as one of the six primary examples of classic follies that he uses to help contextualize the follies of the United States. (Lancaster 1960)

Ironically, despite the massive debt Ludwig left behind along with his fairytale castle, the site has become a profitable tourist site, attracting more than a million visitors a year. (*Welcome to Neuschwanstein Castle* 2011) Like Sleeping Beauty Castle, Neuschwanstein and many of castles in America work as tourist attractions, something that function as a site for fun ahead of other uses.

But Sleeping Beauty Castle never enters the literature as a folly. Its purpose as a tourist attraction places it squarely within the commercial functioning of the park, in spite of its other qualities.

Writing about the Sleeping Beauty Castle, Strodder provides an interesting rationale for the completion of that structure early in the Disney Park’s development.

“The castle, it’s said, was required as an inspiration to the park’s construction crews. To prove that dreams really could come true. To show them what make-believe looked like. And to remind them, finally, where Disneyland’s soul was.” (2008, 379)

Perhaps, if Ludwig would have had the forethought to open access to his many elaborate palaces and retreats to a ticket-paying public, he too might have avoided the label “folly builder” and not gone down in history as the mad king.

The link between castles and folly runs deep. When Hubert de Burgh started building a castle as a part of military incursion into Wales in the early 13th century, he inadvertently set in motion the modern use of the term. Hubert apparently dubbed the site “Hubert’s Folly” after the French “la folie”, meaning favorite abode or delight. However, after the project was abandoned during negotiations between the English and the Welsh, the incomplete castle was razed and the agreement was recorded as *Stultitiam Huberti*, or Hubert’s Folly, after the Latin *stultus* for fool or foolish. This is first known use of the term in English. (Headley 1996, 60-61; White 1878; Walker 1972; OED "folly, n.1". 2011)

Ever since, the idea of folly as foolishness or folly as delight have remained intertwined in the English language, only to separate when the practical aspects of the pleasure of the folly outpace their lack of forethought. Foolishness as a form of delightful transgression against the serious norms of architecture, though, provides an evocative definition of the term in its modern architectural use. And the castle as an architectural typology acts as a secure keep for this construction. Whether in Disney’s towering edifices that are both castles for princess and not castles for princesses or in

Neuschwanstein's castle for a king that was also a fantasy castle for a fictionalized version of a king, the folly castle is as fun as it is foolish.

And this fun form has wide expression in the United States, a country established well after the age of the functional castle as a fortress or political statement of power. All American castles fall out of time and geography, their material presence always contradicting their apparent historicity, always tempting fun in this challenging set of contradictions.

The builders of one such castle, Dupont Castle in the West Virginian woods, maintain an index of castles in the US. Currently, the site lists more than 750 buildings that they classify, in one manner or another, as a castle. (Dupont) From commercial restaurants boasting a medieval theme (Medieval Times) to buildings wearing little more than a bit of crenellation on the roofline to ambitious constructions more organically designed art project than castle (Mystery Castle, Phoenix, Arizona), the list focuses on homes built to look like castles. The fun of castles spans almost every state, in every configuration imaginable.



Figure 1: Bishop Castle

No other castle in the US, though, is quite like Bishop Castle, in Rye, Colorado. Constructed on a two acre site carved out of the San Isabel state forest in south central Colorado, ornamental iron worker Jim Bishop set out in 1969 on a project which would consume the next 40 years of his life and define him as “the castle builder.” The castle is currently comprised of three floors in the main building, highlighted by a massive main hall and topped by three towers, the tallest rising to 160 feet above the ground. The stone structure is laced with metal ornamentation, soaring metal balconies and bridges. A geodesic observatory and a smoke-breathing metal dragon crown the building. Bishop Castle is a stunning monument.

When Jim Bishop set out to construct his own castle he invoked, intentionally or not, several different signifiers of the castle sign in addition to the castle as tourist destination. He also connected his renowned architectural folly to the twin senses of castle as home and castle as political statement.

Over the 40-plus years of its construction, Bishop has labored largely alone, hauling rock from public land, lumber the nearby forests and battling with authorities on issues of zoning, tax, signage and more. Through well-publicized rants, documented on web sites such as You Tube, and advertised to visitors on hand painted signs, Bishop argues an anti-government stance rooted deeply, wittingly or not, in British Common law:

“And the law of England has so particular and tender a regard to the immunity of a man’s house, that it styles it his castle, and will never suffer it to be violated with impunity....”(Blackstone and Jones 1916, 2430)

Popularly rephrased as “Every man’s home is his castle,” this English legal axiom also expresses an important aspects of the castle symbol, that of the castle as a home (or the home as a castle). So while Bishop has never lived in the castle he has built, and never intends to (he has lived on the property in a nearby cabin, though), his castle is his home in the sense of his claims of individual sovereignty and desire to be free from government regulation.

The castle as home also references an even older aspect of the castle, the castle as political claim.

Feeling besieged by government authorities pressing various grievances against Bishop and his castle has led him to claim that he is building the only true castle in the world, in the sense of a fortification against his enemies. “This is probably the only true

castle left in the world as far as a castle because it has been besieged by enemies,” says Bishop in the documentary “Scrap”. (Stoetzel 2010)

Bishop’s claim interlaces neatly with another clear historical point about castles—their ability to physically manifest intangible concepts of law and power. “Like all technologies of power, the castle allowed the interests of its owners to become intertwined with the workings of law.”(Lastowka 2010, 2)

Through the signs on his property, the interviews he gives to documentary and news crews who arrive at his castle and through the monologues he theatrically delivers while working his project, Bishop continues to emphasize a rhetoric of political opposition. Whether yelling about the president or wealthy bureaucrats, Bishop continually contrasts himself and his work to the power elite.

“One of the main things here is the fact that I never finished high school. There’s no machinery, no heavy equipment. No blueprints, no building permits. Paid for all the time as I go and always on an open free theme so the poor people have a place to use as well as everyone one else.” (Martin 1986)

Bishop Castle, then, represents a full set of meanings. This castle is a tourist attraction, a sovereign site wishing for freedom from government interference and a political statement about the power relationships in the country.

What draws visitors to his Colorado mountainside does not appear to have much to do with politics, though. Visitors gawk at the structure as their kids gambol over its precarious steps, ladders and elevated walkways. The first word that comes to mind during a visit to Bishop’s Castle is not “politics” but “playground.”

If Bishop Castle is a folly, as it is routinely described in the literature, it is because, like Neuschwanstein, all other contexts are suppressed. The castle remains a site

for fun and play, built by a madman, his reasons un-important to the brute claim of the heroic stacks of stone: I am a castle/I am not a castle. This reduction certainly was not earned by Bishop through any specific action, or lack of effort to clarify his intentions. Rather, it points to the overwhelming success of the castle as a fun place. If Bishop were to erect a ticket booth and charge admission, the site's presence in catalogs of folly would likely evaporate. The folly would turn into an attraction—still attractive as a fun place, but now instrumental in its ability to generate business. Bishop's Castle may stand for many things. But its ability to stand as a fun place remains its most distinctive, or attractive, feature. And as a fun house, of sorts, it bears further scrutiny has to how it functions in terms of fun.

The arrival at the castle site is sudden, and ironically unexpected. After miles of winding forest road in a sparsely populated corner of the state, you suddenly come upon a line of cars parked by the side of the road. Glancing up the hillside, you see the castle. And even though you've come to see a castle, the physical presence of a massive stone fortress in Colorado provides a delightfully jarring experience.

Once you have parked on the side of the road and hiked up the rough hillside from to the castle, this castle out of time increases in impact. Bishop Castle did not rise from faux brick and is not dressed in gaudy plaster. The entire structure wears its hand-construction in a deliberate manner. The mind simply boggles at the amount of human labor required to move and stack so much rock. Bishop Castle speaks to its central contradiction in material form. This is a castle, in organization, in material and in construction. Still, it's clearly not possible that it is a castle. Jim Bishop's political

proclamations to the side, his castle is simply one of the most strange and wonderful buildings in the world. But it is not a castle.

If visitors departed at this point in their visit, Bishop Castle would have succeeded as fun place. But true to Bishop's vision, visitors are then given the liberty, the freedom, to explore. Other than a sign closer to the road demanding that guests not "Climb on anything. Stay off sand pile – construction area" (See [Figure 2](#)), the site is open to exploration.

The castle presents two obvious entry points, a narrow staircase rising up one of the buttresses in the front and dark archway into a ground floor room. Of the two, the staircase seems the most obvious point of entry, and the presence of the donation box nearby imparts a piece of information to the visitor: This way into the attraction!



Figure 2: Sign at Bishop Castle

Ascending the buttress staircase, another principle feature of the castle comes clear—this structure will challenge the visitor in a contest of will, effort and balance. Unlike more regulated and accessibly designed sites, Bishop Castle feels like a wild site, where anything can happen and the visitor plays the role of an adventurer, working to master the environment through skill and ability. Simply mounting the long, steep staircase transforms the visitor into a player and the castle into a playground. This clear moment of agon—the player versus the environment— sets the stage for what comes next. Bishop Castle, at least in one sense, is a jungle gym meant for its player to approach as a paidiaic game.

Gaps between floorboards and the wall create treacherous drops as well as unfinished balconies and windows still waiting for the smallest covering to protect against a fall to the ground below act as constant reminders that the building will not protect the player from their own carelessness or lack of dexterity. Like a set of monkey bars on the playground, if you lack the ability to summit the top, reason dictates that you stay safely on the bottom rungs. Likewise, the challenge of mastering this tenuous building presents a clear thrill.

The almost impossibly steep stairs that wind up the various towers challenge the player to control their movement and their nerves. And as you ascend higher and higher into the structure, another playful aspect of the castle reveals itself. Just as the physical challenge of agon is embodied in the structure, so are the vertigo-inducing aspects ofilinx. The twisting and turning of the castle's staircases create a disorienting sense of dizziness on their own. Then, summiting the stairs and looking out only to discover a

small metal path leading to a geodesic dome made of iron, with a small ladder into its interior, further challenges the player to climb further, higher and into an increasingly vertigo-inducing location.

Those not brave or sure-footed enough to ascend to the highest points in the castle can still enjoy the building's constructed ilinx. Wrought iron balconies hang on apparently precarious hinge-points anchored along the castle wall, suspending visitors well above the ground, and providing a clear view through the mesh flooring to the forest floor below. Standing on these balconies you can only ponder the skill of the builder and his accuracy in assessing the correct load to support the castle visitor's weight.

When Bishop exclaims that his castle is meant to be "free and open to the public", he makes a statement about the freedom and openness of his playground, not just of its anti-commercial political stance. Because, like the playground, Bishop Castle allows a free range of motion and possibility unlike much of the rest of the world. And in the same way that children delight in the special is/is not of having control in a microcosm of the world in which they have little control, so does Bishop Castle offer the same promise to its visitors. The castle works as a playground because it promises the thrill of contest between the visitor as player and the place; it stimulates the mind by disorienting the player, placing the rational perception of space into the exaggerated danger of heights and an unsure orientation.

Following Caillois notion of *paidia* as free play, the castle offers few rules. Still, all play comes with constraints that make the play possible. So too with Bishop Castle. While the castle remains a site of *paidiaic* spirit, a special form of rules comes into play—those of gravity. Of course, any physical location, at least on the earth, sits subject

to the rules of gravity. But Bishop's construction plays with our expectations in a calculated manner that enhances its experience as a playground. At every turn, visitors question the safety of structures—the sinuous iron work and steeply treacherous steps reminding visitors that the rule of gravity is still in force. Missing railings combined with un-even footpaths and towering heights combine to create a sense of very real consequence in the environment of serious injury or even death. Relevant in this case are Bishop's public displays of the stability and sturdiness of the edifice as well as emphatic claims that no one has been hurt when visiting the site. (Stoetzel 2010). Bishop's rhetoric is designed to counteract the very real threat of falling at his castle. In this way, the rule of physics presents a palpable is to the castle's fantasy and Bishop's description of the is not. Where the form of the castle suggests fantasy, the material of the castle reminds of consequence.

Less successful, though certainly functioning at the site, are the notions of mimicry and also time.

Bishop's castle clearly mimics a traditional "real" castle. While there is no evidence that he has labored to build a castle following any medieval plans or blueprints, the undressed stone and ironwork, the timber and glass, certainly conjure medieval idioms. Whatever Bishop's actual intentions in construction might be, he has built a building wearing the cloak of a castle from antiquity. The mere physical presence of this stone edifice far removed from the time place in which we would expect to find it anchors the core of the site's fun. This is a castle which is also not a castle at all.

For his part, Bishop does little to extend the mimicry and role play beyond the material facts of the castle itself. There are no suits of armor lining the halls, no rough

hewn benches in the main hall (just some folding chairs cordoned off in a corner). There are no gay banners flapping from the peaks of the castle turrets, no medieval trappings of any sort. The grounds surrounding the castle feel more like a construction site, with an old truck painted with an advertisement for the castle sitting prominently near the entrance. The castle gift shop fills a spacious room in a rustic log cabin, which would seem out of place in most cases. But in the woods of Colorado, it is by far the most authentic structure on the site. And while the gift shop does offer appropriately castle-inspired souvenirs, it also sells jewelry and other crafts from local artisans giving the entire store more the feeling of a roadside attraction than any sort of themed destination.

Bishop Castle is neither Sleeping Beauty Castle nor Neuschwanstein. Unlike these castles and certainly the Winchester Mystery House, narrative surrounds Bishop Castle rather than drives it. Many visitors may know of Bishop's political activism, and certainly most come to marvel at the castle built by one man. But these narratives also blend with the visitor's own stories, imagining the castle as a sight for fantasy, complete with dragons in an unseen dungeon and sleeping princesses in the tallest of the towers. Of course, none of these narratives are complete, and the lack of a more developed narrative—whether political or religious, fantastic or fantasy—is most notable. Bishop Castle speaks for itself, and does not rely on a super structure of narrative. And Jim Bishop, the castle builder, seems content, if not resigned, to the fact that his castle speaks louder than his signs and public ranting.

Still, unlike some fun places, Bishop Castle does not attempt to deny its cultural context. This castle is a tourist destination, but also a political statement. It is an art project, but also a simple obsession. It is a massive construction project but also one

undertaken by, and thus achievable, by a single person. Not only is all of this spun into the site's narrative, it is infused into the very rhetoric of the place, in signs scatted across the lot and through the words of Jim Bishop, castle-builder, whether he is at work or conducting an interview for film or television.

The castle is a tourist destination. But unlike other tourist sites, whether run for commercial purposes or supported indirectly through government funds, Bishop Castle does not require a ticket to enter nor does it subsist on tax dollars. Despite the ample signage asking for donations, there is never a point at which the visitor feels they must contribute to enjoy the site. In this regard, the castle is closer to a church, with the traditional offering plate or coffer in evidence, but no pressure to pay to participate.

"A tourist attraction but never a tourist trap," Bishop intones in a homemade documentary used for raising building funds. (Martin 1986)

What Bishop's Castle exchanges in return for access to the property is an ideological exchange. Whether you contribute or not, you are subject to Bishop's political tracts, painting on mental signs, and on many days, the man himself ranting to anyone who will listen, about his political beliefs.

On this point, Bishop's castle is operates much like The Garden of Eden in Lucas, Kansas. ([Figure 3](#)) A roadside attraction build out of concrete behind his home in this small farming town, S.P. Dinsmoor hoped to lure weary travelers with his eccentric sculptures long enough to provide them sermon and a dose of anti-bank wisdom.



Figure 3: Garden of Eden

Whether the Garden of Eden or Bishop Castle, the exchange value of the tourist site in terms of the rhetorical value seems in question. Do folly builders build to trade spectacle for a moment of the viewer's time? A simpler explanation in each case is that both men built because they wanted to and visitors only justified the means as a visible end. At the very least, a self-funded tourist site raises questions as to the purpose of the site. While no one, except maybe for the builder, can ever say precisely why they build, attempts to rationalize the structure as a means to some other ends is fraught with difficulty. Perhaps Bishop Castle is a political argument writ in stone. Or, as the builder has stated, perhaps it is a work of artistic or spiritual expression. To the visitor, the site is what it is. No one pays for admission so no strong claim as to the purpose of the building is as compelling as the reasons the bring carloads of tourists to the castle each year. And what is that reason? Fun seems the most obvious candidate. This place is a palcea for play and wonder, a place out of time and place that excites the imagination and

encourages playful exploration and meaning making. Bishop's Castle may be a folly, and that folly is, like all American castles, the folly of fun.

IKEA

First Person Shopper

As one of the largest furniture and household goods retailers in the world, IKEA is something of a phenomenon. According to the company's website, in 2011 the 69-year-old firm operated 325 stores in 39 countries, generating 734 million store visits and \$33 billion in revenue (26 billion Euros). (IKEA 2011b)

The firm's Swedish founder has long since moved the actual ownership of the network of IKEA companies and brands to a Dutch non-profit foundation. But from the bright blue and yellow iconic store colors that mirror the Swedish flag, to the Scandinavian-styled furniture and the Swedish meatballs in the store's cafeteria, IKEA remains a Swedish brand in the mind of the public. (Lindqvist 2009)

At this scale of global success, many factors contribute to the IKEA story, and many have been discussed in the literature. But one aspect, in particular, falls within the focus of the current research. Unique in its approach to retail, IKEA offers visitors an version to shopping more like a theme park ride, and provides a very precise form of domestic fantasy. In short, IKEA's shopping experience can be read as a form of a game, presented in theatrical terms, and ultimately making a visit to one of their stores a fun event.

While not itself a fun house, IKEA relies heavily on the notions of is/is not ambiguity to make shopping fun, and turns the shopper from a voyeuristic tourist into an interactive role-playing participant.

“People have cared intensely about the decoration of their houses since cavemen began painting on walls,” wrote Lauren Collins in her New Yorker essay on IKEA aesthetics. “We are attached to our belongings because they are vessels for our memories and for our aspirations.” (Collins 2011)

IKEA, in Collins critical analysis, has provided a contemporary twist on the nesting instinct, turning the fundamental anchors of home life into a momentary act of performance.

“Choosing a piece of furniture was once a serious decision, because of the expectation that it was permanent. It is said that Americans keep sofas longer than they keep cars, and change dining-room tables about as often as they trade spouses. IKEA has made interiors ephemeral. Its furniture is placeholder furniture, the prelude to an always imminent upgrade. It works until it breaks, or until its owners break up. It carries no traces.” (Collins)

In other words, Collins argues that part of IKEA’s charm and attraction is how its home furnishings become something like a costume, a temporary guise that the wearer can swap out, changing their identity as easily as they change clothes. IKEA, in this view, is not only a wildly successful international retail furniture store, it is also a domestic theme park, IKEA Land, where visitors “... treat IKEA as a human-size doll house, hanging around its prettily furnished rooms just for entertainment.” (Collins 2011)

Where the typical American retail store has moved to the warehouse model—a brute rationalism of stacking, storing and selling at scale that speaks to the customer of efficiency as low cost—IKEA moves in different direction. Instead of using its massive warehouse space to simply argue a cost-savings inherent in bringing the customer closer to the supplier, thus eliminating cost-generating middlemen and overhead, IKEA prefers to produce a performance of its own. This is the retail of fantasy. IKEA’s space is used to create domestic tableaux, scenes from a home life we imagine living. The store provides a

tour through a variety of domestic visions, ready for the visitor to experience, moving from set to set. And if you don't choose to invest in the complete package fantasy—an entire bedroom set or a new kitchen—there are plenty of souvenirs to pick up to commemorate the visit. Can't afford that couch? Those twenty dollar pillows sitting on it might not look bad at home. Or at least you can grab a cheap reading lamp, graciously placed on display nearby.⁹

IKEA founder Ingvar Kamprad has long worked to position his company as an enterprise that promotes democratization. “We have decided once and for all to side with the many. What is good for our customers is also, in the long run, good for us.” (Torekull and Kamprad 1999, 228). In this perspective, IKEA's tastefully designed products, sold at extremely low prices combine to present an image to the customer of a socially conscious company delivering high quality, and meaningful goods.

So, rather than pile furniture like cans of soup in a grocery store, IKEA piles individual goods in bins to create the cost-savings sense of bulk buying. Further they provide signs explaining how their approach saves their consumers' dollars. (Collins 2011) The external rhetoric of IKEA focuses on corporate values that deliver social value to the shopper.

The power of this rhetoric tends to mask the irony of the size of the IKEA warehouse compared to display after display emphasizing compact urban and Scandinavian living. “Visit my 270 square foot home”, invites one of a series of

⁹ This souvenir impulse can go awry. Even though most everything on display in the showroom area of the IKEA store is for sale, most of these items must be collected in the store's “marketplace.” So, impulsively grabbing an item from the interactive displays can lead to embarrassment and inconvenience at the checkout where are forced to retrace your steps through the store to locate the item you displaced from the showroom set.

complete home sets scattered through the IKEA showroom. Unlike sets emphasizing living rooms, dining rooms, bedrooms or kitchens, the series of “It’s my home” sets package a full range of IKEA products into a hypothetical floor plan imagined around a specific lifestyle—new family, urban bachelor or college graduate. ([Figure 4: IKEA "It's my home" set](#)). IKEA’s massive warehouse size and build your own furniture model may speak to their cost-cutting business practices and appeal to the customer on a budget. But the design of the presentation of the products distances the customer-retailer relationship through a careful construction of fantasy dioramas visitors are expected to explore.



Figure 4: IKEA "It's my home" set

The size and layout of IKEA stores differ somewhat across countries and regions. But the Denver-area IKEA store in Centennial, Colorado layout is typical. This 415, 000 square foot building divides its shopping areas into a winding walkthrough of its various

showroom departments and a Swedish-themed cafeteria on the top floor, and a more traditionally organized “marketplace” and warehouse on the first floor.¹⁰

Visitors to IKEA are expected to head directly to the second floor, where they wander from domestic scene to scene, seeing how IKEA furniture and home decorating systems work in a variety of well-designed sets.

At the top of the stairs is a compact living room and dining room. The table is set for the holidays, complete with name tags at each setting. There’s one for Gunnar, another for Lizbeth. Exploring the domestic scene further, you find that the children’s art area, near the lavish dinner table, features kids’ names—there’s Gunnar, there’s Lizbeth. The story starts to come clear. You have wandered into an idyllic holiday meal in an equally ideal domestic place where the living room, the dining room and the children’s play areas all flow together into a compact and tasteful whole.

But if you look closer, the narrative sketch fails to provide details. There are family pictures on the mantle, but there’s no story in the images. The pictures are of children playing and happy family, but the collection is ad hoc. These are not real family photos but varied archetypes of family photos. You can infer, but not fully describe, the sort of family whose home you have wandered into.

These narratives have been carefully sterilized. Photos don’t tell a clear story and the clothes you find in the closets are carefully chosen set dressing—whites and blacks of the most neutral order—kitchens with empty pantries, book shelves filled with Swedish books chosen for their colors rather than content. Clearly, these are fantasies ready to populate.

¹⁰ The descriptions of the IKEA store in this case were collected during a series of visits in January, 2012.

And so it goes, from department to department, set to set, following a path that meanders with twists and turns that ensure no long sight lines to distract the visitor from each carefully laid out “room”. Each room set seems to only lack a family sitting on the couch or the dinner table in order to complete the illusion. Arrows in the aisles indicate the appropriate direction to follow through the 3D presentation, taking in each site in a carefully orchestrated order. ([Figure 5: IKEA Showroom map](#))

This winding path not only ensures that shoppers, now cast as tourists or visitors, will see most of everything IKEA has to sell in carefully constructed contexts, it also provides a kind of experience more in common with entertainment sites than furniture stores.

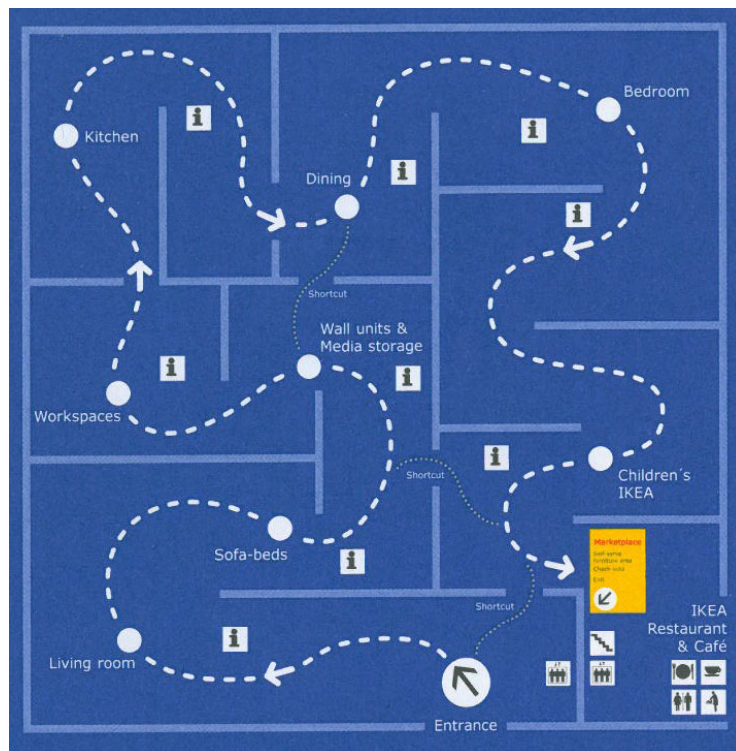


Figure 5: IKEA Showroom map

Lindqvist likens this structured path through the showroom areas to those of a museum, where the spatial organization presents a narrative of progress. (Lindqvist 2009)

Of course, unlike a museum, IKEA visitors are invited to explore the exhibits, sit in the chairs, lay on the beds, open the drawers and engage in domestic play with the sets.

Because, whatever else IKEA represents, much of the store is organized like an adventure game. And if not a game in a literal sense, then at least like a game, IKEA is a machine for generating fun.

“In the IKEA store, the placement of “Småland” (literally ‘little country’), the children’s play area, near the entrance makes it simple for adults to delegate someone to watch their kids play before they begin shopping. It further communicates from the start that a trip to IKEA is a fun excursion rather than an obligatory errand.”(Lindqvist 2009, 47)

The primary rhetoric surrounding IKEA may be of social progress and democracy, but the company does recognize, whether or not it publically admits, that it baits those progressive hooks with entertainment and fun. Referring to a massive new IKEA shopping complex planned for Moscow, designer Simon Dance told Art Newspaper, "It's about creating a series of events. Like a great Hitchcock film, you'll turn a corner and there will be something you don't expect."(Burns 2010) That is, the fun of IKEA is as intentionally designed as each of its spatulas and desk chairs.

When describing the core of the adventure genre, Rollings and Adams describe a system of entertainment already familiar to the IKEA shopper:

“Although the genre has changed considerably over the years, the games are characterized by certain qualities that they all share: exploration, collection or manipulation of objects, puzzle solving, and a reduced emphasis on combat and action elements.” (2003, 443-444)

Obviously the IKEA stores do not attempt to work as a designed game. Rather, the implication to explore here is to understand how IKEA works on the level of a machine for generating fun in the minds of its visitors, and referencing the similarities in the adventure game genre provides a handy method for conducting this analysis.

In addition to the elements of exploration, collection, manipulation of objects and puzzle solving, Rollings and Adams also add the aspects of setting and storytelling as key to the adventure game genre. We will look at IKEA in terms of each of these key elements.

Story

“Adventure games rely on storytelling more than any other genre,” state Rollings and Adams. (457). And so too does story play a key role in the IKEA experience.

Flipping through the IKEA catalog, the role of story in the presentation of the company’s products stand out:

“Moving in together means combining two homes into one. How do you fit everything in without having to compromise? Try using two chaises in the middle of the room instead of a sofa along the wall, It’s one simple way to free up space for more storage and it creates a cozy little nest where the two of you can relax and you’re your own thing, together.”(IKEA 2011a)

This description sits with a photo of a thirty-something couple in a small, hundred-square foot room, lounging according to design, him with his Xbox controller, her with an iPad. Even though the majority of the photographs in the catalog don’t feature people, and even fewer provide such directive descriptions to decode the scene, every page presents a story. Often, these stories are told with a small prompt, “The easier it is to clean-up, the sooner you’ll get to your magazine.” (48) The room in the accompanying photograph hints at a family with a small child, a lot of magazines and, of course, even more tidy storage solutions.

The IKEA catalog, a publication that stands as one of the largest print run publications in the world, fits the retail-as-fun model. Writing about the careful set creation and back story that goes into each catalog photograph, including splashes of

water around sinks and pillows with indentations to show use, Collins points out, “Just as the goal of a real room is to look like a fake one, the goal of a fake room is to look like a real one.” The images that fill the IKEA catalog are carefully fake, but designed to look real. The viewer falls into the intentional ambiguity of pictures of places that are not pictures of places they are at all. Because while all pictures are magical in their ability to represent something not present, IKEA’s pictures are always careful to leave a place for the viewer to place themselves.

As expected in commercial advertisements, the products are presented in an ideal light. What makes the IKEA catalog more interesting than other, similar types of product catalogs is its clear reliance on narrative. The couches and kitchens are not left to speak for themselves. They are props in a meta-narrative that IKEA carries through into its stores. Kamprad explained the purpose of the IKEA catalog “...as an inspiration and a magnet pulling people into the stores.” (197)

Much as the narrative of an adventure game provides the rationale for action and a context for the goals of the action, so does IKEA produce a series of stories about itself, about its products and about its customers.

Setting

While commercial narrative is, to some extent, an inevitable by-product of marketing and sales of any business, IKEA cements its more sophisticated use of narrative through its use of setting. After all, every story takes place some place, and the setting of a tale can be as important as the story itself. In the case of IKEA, the corporate story means little until placed inside the big blue warehouse box of an IKEA store.

People visit IKEA not just to buy furniture and flower pots but to experience something simultaneously exotic and familiar.

“The player wants to avoid the drudgery of everyday life and enjoy herself in another place entirely. In the case of the CRPG¹¹, why would a player choose a role in which she found herself emulating her own real life?” (351)

Rollings and Adams use this argument to justify the adventure game genre’s focus on fantasy and science fiction settings. So, on first glance, it may not be obvious how IKEA’s “furnish your home” setting allows people to “avoid the drudgery of everyday life”. In fact, through the measured use of the exotic appeal of “Swedish design” and the constant fantasy of domestic reinvention, IKEA encourages people to imagine they are someplace else with as much force as a videogame that puts the player in the role of a space marine saving the galaxy on some far-flung planet.

“So IKEA becomes something of a nationalistic project in which whatever is Smålandish¹² is just the necessary starting point. In the restaurant, the meatballs and smoked sausages are from towns in Sweden. The furniture is still mostly named in Swedish, and there is no talk of removing the circle above the å or the dots over ö. What is Swedish is exotic, tempting to buy....” (Torekull and Kamprad 1999, 122)

The store’s bright blue and yellow signature colors reflect the Swedish flag and the designs allude to Scandinavian aesthetics. For the American shopper, at least, a visit to IKEA evokes a journey abroad as much Disneyland’s themed areas whisk visitors off to any number of exotic locales.

Supplementing this vision of the compact and exotic Scandinavian home, IKEA also themes its furniture sets with other forms of ideal domestic fantasies. Through their catalogs and showroom sets, they give visitors a chance imagine what it would be like to

¹¹ Computer role playing game

¹² Småland is the region of Sweden where IKEA was founded and remains a spiritual point of connection for the company.

live life in a hip Manhattan apartment, entertain in a spacious suburban home or nestle up by a fire in some forest retreat.

If IKEA's Swedishness provides a tourist destination, the domestic scenes provide the background for the shopping interaction.

So, while IKEA does not present settings as exotic as those of most adventure games, the settings in IKEA appear to work in a similar manner to games. Rollings and Adams make a clear argument about is/is not configuration of fun in setting and the player's desire to pretend to do something unlike real life. But, perhaps their commercial game-focused analysis overlooks the desire people have to play something like life, but not their life. For example, while typically categorized as a "simulation game" the best-selling game *The Sims* fits well with the definition of a role playing game. And it is appropriate that one of the *The Sims 2* content expansion packs was *IKEA Home Stuff*, a software add-on that provided players with access to over 70 digital versions of real IKEA branded home furnishing items. The home, as much as the medieval battlefield or outer space planet, can provide an effective setting for the adventure narrative to anchor in and the player to play.

Exploration

Narrative and setting provide a context for action in the adventure game.

Exploration becomes the primary form of action in the adventure game. Likewise, IKEA provides a platform for shopping as a form of exploration. Specifically, the exploration of the IKEA showroom works as an extension of the narrative. If story IKEA tells is, "This is how a functioning family lives happily at home," and the setting is the idealized

domestic set for different types of families, then the exploration of that set is governed by a specific and controlled point of view.

While people always embody their own perspectives in physical space, the narrative frame of IKEA encourages an ambiguous point of view falling between the ideal home and the home that the viewer actually inhabits. This point of view locates between the ideal, aspirational sets of IKEA and the actual lived space of the visitor. A third frame, lying between the IKEA ideal and the domestic reality of the visitor creates a third-person perspective reflective of that in videogames. In some sense every IKEA shopper is a voyeur. But the careful abstractions of the IKEA sets entice the visitor into a more active role. IKEA may be a form of domestic porn, meant to be looked at and fetishized. More so, it is, like the first person shooter game—a first person shopper experience, where the IKEA guest only has to extrude their personality and desires into the provided mold.

For those unfamiliar with the third person shooter game genre, the suggestion of a third person shopping experience might sound unnecessarily abstract. Some clarification can help both sketch how the IKEA shopper operates in a different mindset than in other contexts, and how the notion of the third person game is closely related to the central is/not is ambiguity of fun.

The first-person perspective was defined and made popular by the game *Wolfenstein 3D* in 1992. In its original incarnation, the player views the scene in the game from the game character's point of view. Adding to the illusion of "being there", the player could see the hands character they controlled. When the character wields a weapon, the player can see "their" hands holding a gun or a knife. *Wolfenstein* also

provides a small mug shot of the character, which provides some visual indication of the “damage” the character had sustained as well as literally putting a face on the character. Subsequent iterations of the first person shooter approach abandoned the character face screen, but widened the visual point of view allowing games to show more of the character’s arms and greater detail on the items the character holds. But this increased visual detail was never accompanied by greater detail in the character. The hands of a first person character in games are designed liked gloves for the player to wear. The minimal amount of character information needed to place the player in the narrative setting is all the character development typically applied to games in this genre. The character might be a private landing on the beach during D Day. So the player knows the character is a soldier. But no other autobiographical detail or background is required to impel the player further into the game, the action or the narrative.

Even when more modern 3D graphic engines allowed games to show both the first person perspective as well as more traditional third person cinematic perspectives, it is still common to leave the character abstract. As an example, Master Chief from the Halo series is widely applauded by the game community for the iconic design of the character. During active game play, game players control Master Chief from the first person perspective. During cinematic sequences meant to advance the story, Master Chief is always shown in a full suit of body armor, including a gold reflective face mask. While much game lore has revolved around the question of “Who is Master Chief?” the answer was always clear: The player is Master Chief.

As the first person shooter genre develops the abstraction of the character inside increasingly deep narratives remains. The reason for this, while apparently problematic

when viewing games as a form of narrative, makes sense when viewed through the construction of games as machines for generating fun. The is/not is construction of a player who is both the central character in the story, and not the character, the player as the primary interactor, but also the willing passive participant in the greater narrative, remains the core of the first person perspective. The first person perspective can make the experience of the game play seem more immediate and personal while allowing the player to be someone other than themselves.

Other genres of videogame play present additional approaches to the player/character relationship. And many contemporary games blend the distinctions further by wildly mixing different player perspectives in the game. What is critical here is not to discern a matrix showing all the different types of the player/game character relationship. Rather, the point at hand recognizes the first person perspective as a unique form of that relationship that has resisted character detail and depth as a means to provide the fun experience possible in the first person form.

If the first person perspective was simply a means to place the player fully in control of the narrative, then the value of the form in any sort of narrative play would be minimal. However, the first person shooter genre in games has often been used by highly narrative games. Because, despite what might appear as the tendency of the first person game to give the player too much control at the expense of the narrative, various tactics allow the narrative to move forward while allowing the player freedom of action.

As Michael Nitsche notes in his analysis of the first person perspective:

“...the developments of the first-person point of view remain character-centric, but elaborate on the possibilities of staging this character in more precise and dramatic moments in the game world. The game world itself is consciously used as a form of visual frame for the presentation and some

indicators point back to a direct control of the image. Combinations of all of these features introduce a more structured and dramatized version of the seemingly player-fixated first-person point of view.” (Nitsche 2008, 108)

One way that games maintain narrative structure in the face of player/character identification and control is through what he calls, “narrative architecture”. He explains how game space “enforces a certain vision through the limitation of the spatial practice within it.” (106) In other words, just as a theme park ride cannot force the rider to look in a certain direction, but can attract attention through the motion of the ride cart, through dramatic lighting and other environmental queues, so can the wide-open setting of a first person game, still structure the space to maintain the integrity of the narrative, even while leaving the player feeling in control.

Following this line of thought, it is no surprise that a retail enterprise would structure its environments in a similar fashion. After all, giving shoppers the feeling, and even possible illusion, of action, while guiding this action through a predetermined narrative script (presumed toward a sale), seems obvious. The only question is, “How would a retailer provide the correct first person perspective as an interface into the retail narrative?”

A first clue to the structure of the relationship between the IKEA shopping experience and the shopper, the shopper’s perspective, can be found in the catalog. Consider these examples of call out language in the 2012 catalog:

“Where there’s always room for friends. The after-school kind and the imaginary kind.” (90)

“Goodbye, junk drawers/ Hello locating the timer.” (120)

“In one of those bags there’s a credit card, which wasn’t maxed out on a bedroom.” (160)

“Good design is not tripping over the blocks as you tiptoe out.” (225)

These bits of marketing copy features both a second person narrative form (the narrative cousin of the first person perspective in games) and sentence fragments that wait for the reader to fill in the blanks. Even though each of these blocks of text hovers over detailed domestic scenes, the words ask the reader to fill in the blanks. The kitchen in a photograph provides a prototypical setting and the text provides the narrative—this IKEA kitchen is a place for kids. The reader is left to provide the rest of the story through their own actions. And the action suggested is always: Buy something from IKEA to bring that story home.

This narrative and setting, accessed by the shopper through what we have described here as the “first person shopper” perspective, creates the basis for exploration. The IKEA visitor knows the story and the part they play. Next, navigation of the narrative environment becomes key.

Before mounting the escalators at the Centennial, Colorado IKEA store, helpful store employees encourage you to grab a large yellow shopping bag, a map, a paper tape measure and pencil. These items provide the initial tools in your quest.

As previously described, the route through the IKEA showroom meanders in such a way as to make it difficult to skip between areas of the showroom. So even though there are labeled “short cuts” on the map, the easiest way through the showroom is to follow the large directional arrows on the ground. This approach mirrors Nitsche’s observation about “narrative architecture” to the extent that the place gives an illusion of

player/shopper control. In reality, the easiest route through an IKEA is by following the “rules” laid out in the map and marked on the floor.

The map also doubles as a note pad, where shoppers are meant to jot down product numbers for furniture they may pick up at the end of their journey in the IKEA warehouse as well as specific measurements and reminders to check room dimensions when you return home.

The furniture sets are mostly three-sided, giving a full sense of a room, complete with shuttered and curtained windows, giving each shopper a sensation of moving from place to place, rather than from display to display. In some cases, the narrative is explicit—this is a home for a compact urban couple with a child of about three. In other cases, the narrative is more general—this living room belongs to an older couple, this bedroom is for a daughter who might be off college soon. In no case do the furniture sets describe so much as to ruin the first person shopping experience. And even when you look inside closets and discover clothes, the selection consists of blacks, whites and khakis suitable to the scripted owner in the theatrical setting. It is important, that there are clothes in the closets and toys on the kids’ shelves. At every turn, there are details to discover. And the winding path through the showroom continually enforces sight lines, adding visual rewards to the explorer intrepid enough to forge ahead.

Collection, Manipulations and Puzzle Solving

With narrative, setting and exploration described as core elements of the adventure game genre, Rolling Adams detail three other key verbs in the adventure game space—collection, manipulation and the solving of puzzles.

The collection and manipulation of objects are used to solve puzzles which allow the adventurer to continue. Whether the item to be collected is a key, manipulated to open the correct door of a dungeon or to solve more complex puzzles, the basic game mechanic remains the same. And in the adventure game, solving puzzles also supports the development and advancement of the story. The story remains primary.

“In most computer games, the player’s role is largely defined by the challenges she will be facing, whether it’s as an athlete in a sports game, a pilot in a flight simulator, or a martial arts expert in a fighting game. But adventure games can be filled with all kinds of puzzles and problems that are unrelated to the player’s stated role. Indiana Jones¹³ is supposedly an archeologist, but we don’t see him digging very much. The role arises not out of the challenges (unless you specially want it to), but out of the story.” (Rollings and Adams 2003, 455)

Taken together, the elements of setting, exploration, collection, manipulation, puzzle solving and, most of all, narrative, form the central mechanisms of a successfully functioning adventure game machine providing a clear sense of wonder and accomplishment. As was suggested earlier, if real life is a narrative filled with struggle and challenge and the feeling of low reward, then the adventure game is a narrative filled with exotic struggle and challenge in a well-defined space where the rewards are always greater than the effort required to realize them. The adventure game is a story of triumph through labor and wit.

Following the claim that IKEA provides a similar system of fun to the adventure game, IKEA’s first person shopping experience provides opportunities for a visitor to experience these aspects as well. A similar system designed to a familiar outcome.

The IKEA shopping interface includes maps which outline the path to the ultimate goal—the checkout stand. And the pencil and inventory list provide a handy method for

¹³ Referring to the videogame Indiana Jones and the Infernal Machine

keeping score inside the adventure game model. As visitors explore the store, they collect product numbers and fill their yellow bags with small items. The collection process is deliberate and encouraged. What normally would be classified as an “impulse buy”, suddenly becomes more like the gathering of entities in a game. How those Yngsjö tea lights (3 for \$1.99) or a couple of Gosig Mus soft toys (\$.99 each) will help solve the final quest is unclear at the moment you grab them. But in the back of your head murmurs the thought, “I’m going to need this.” And, per Rollings and Adams descriptions of the adventure game genre, this need must be felt in relationship to the overarching story. The IKEA narrative is always some version of improving the quality of your life, of idealizing your domestic setting. And that Fabrina bed spread (\$16.99) would add a touch of refined comfort to the Malm bed frame you’ve had your eye on.

Collecting these objects, turning them over in your hands, sitting on them and imaging them in place back at home provide the primary manipulation of a the narrative puzzle you are asked to solve: How does this IKEA product and lifestyle fit into *my* life?

And lest the puzzle solving seem too much of a metaphor, the 2012 IKEA catalog provides an enticing image. A long red couch sits jammed into a space perhaps a half foot too short. The couch rests lodged into the space, two legs on the floor and another two legs perched precariously above the baseboard. The caption exclaims, “Sometimes things don’t go according to plan.” (370). Even though the image anchors a page describing the company’s return policy, it also speaks to the planning, call it puzzle solving, which comes with each IKEA visit. Rather than chastise the buyer for failing to bring a measuring tape (in addition to the paper tapes provided for free at the store, even the spine of the IKEA catalog substitutes as an 8.5 inch ruler), the image is a playful

reminder that the puzzle IKEA provides are all in fun, they are all a part of the narrative, and such simple accidents of calculation can be remedied by a return. In IKEA Land, consequences are negotiable.

While running a profitable company with a clear bottom line, IKEA manages to sell the image to its customers of an adventure in domestic improvement. The IKEA shopping adventure is shopping that is not shopping in a store that is not a store. In short, IKEA makes buying pots and pans, bed linens and book shelves, into an amusement and that amusement is structured remarkably close to a game.

Of course, it would be unnecessarily reductive to assume that the IKEA store, and supporting materials such as the catalog, only function to provide fun. Clearly the valorization of Swedish culture and Scandinavian design, the environmentally conscious face, the low cost and progress ideals are also important elements in the overall success and attraction of the IKEA product line. In this case though, the benefit of seeing IKEA as a system for generating fun helps both clarify the method for discussing fun places, and provides additional insight into the functioning of this global megabrand.

When Collins laments, “The ease of self-invention that IKEA enables is liberating, but it can be sad to be able to make a life, or to dispose of it, so cheaply,” she comes up directly against the notion of fun. For the adventure game fantasy of IKEA to work well, it must be temporary. The “playing house” sense of the store comes home as a “playing house” at home. Eventually, the urge to return to the store, to dress up a room with a few new touches or to re-dress it in an entirely new costume keeps the IKEA customer returning to the retailer’s attractive domestic fantasy land.

For IKEA to be fun, it must offer its patrons the joy of the mask and the costume and allow it to be taken off. Collins might regret this temporary approach to material goods. But for the IKEA fan, it's all in good fun. And whether or not she can embrace this fact in her analysis, Collins certainly does recognize it. "IKEA is Legos for grownups, connecting the furniture of our adulthoods with the toys of our childhoods."

Disney

The home as attraction

Since the beginning, Disney has rank rated its rides. And even though the E Ticket is now nothing more than a bit of Disney history, a nominal ranking of rides exists among Disney fans. In terms of Disney park attractions themed as a home, the Haunted Mansion has stayed at the top as one of the Disney Park's more popular and enduring rides for many years. The image of the home is deeply rooted in the theme park imagination.

Within the theme park industry, the original Disneyland in Anaheim stands as the measure of the category. And Disneyland has hosted, and continues to offer, many different images of the home. Since the park's inception, the Carousel of Progress, the Chip and Dale House, Goofy Bounce House, Haunted Mansion, House of the Future, Mickey's House, Minnie's House, Mr. Toad's Wild Ride (Toad Manor), Swiss Family Treehouse and Tarzan's Treehouse have provided a coherent set of home-themed attractions. And while these attractions represent a small selection of the more than 100 attractions and rides that have graced Disneyland over the years, taken together they show how Disney uses the image of the home to create something that park visitors, promised entertainment and escape, will consider fun.

While these Disney “houses” are only homes in the most abstract and representational sense, the value of looking at the Disney vision of homes lies in the particular overlap of the place of the image of the home in a fun place, the amusement park, with the tremendous influence and footprint that the Disney company and the Disney parks have had on amusement park design and theory. To better understand the Disney “homes” is to gain insight into the image of the home as a component in the amusement park fun machine. Further, examining how an entertainment company builds a fun house will help elaborate on the broader concept of fun.

This survey of Disney park homes centers on Disneyland, the first of the Disney parks and in many senses, still the most important in terms of setting the tone and philosophy of the other worldwide parks, and on three attractions in particular: Mickey’s House, the Carousel of Progress and the Haunted Mansion. The other home-styled attractions, as well as many food stands that have mimicked a domestic setting in their design, also embody the Disney approach to the home. But Mickey’s House, the Carousel of Progress and the Haunted Mansion provide a template for how Disney uses the image of the home to generate fun. The Haunted Mansion shows how this is done in a ride, the Carousel of Progress as a theater and Mickey’s House as walk through, static set.

Carousel of Progress

For the 1964/65 World’s Fair in New York City, the Disney Company was commissioned to create four attractions. Buoyed by the success of Disneyland, opened in 1955, the company earned a reputation for bringing entertainment out of the theater and into the physical environment.

General Electric Progressland, Great Moments with Mr. Lincoln in the Illinois Pavilion, It's a Small World for Pepsi and the Magic Skyway for Ford were created by Disney to both edify and entertain guests along way of advertising for their respective sponsors. The success of each of these attractions can be measured, in some degree, by their longevity. All of these attractions found their way into the Disney parks, three more or less in their entirety, with the Magic Skyway being broken out into individual animated dioramas used in various Disney locales.

Progressland was developed for General Electric to “tell the story of progress made possible by the advent of electricity and how it had made the home a better place.” (Hench and Van Pelt 2003, 10). The Disney design team took an idea for an attraction at Disneyland (Edison Square) and located it in a circular building divided into six pie-shaped theaters organized around a central hub. Guests entered one of the theaters at the loading position and when full, would rotate to the next position. In each new position, theater audiences would watch a short, theatrical presentation on one of the central hub's four stages. The mechanism of moving the theater in a counter-clockwise motion to reveal the next set and act in the show provided a unique viewing experience and facilitated the rapid movement of guests through the attraction. As one audience was loading, one was unloading and the other four were watching one of the four acts in the presentation.

This assembly line-like motion of the audience through the attraction was mirrored by the use of Audio-Animatronic (AA) characters on the stage—life-like robots who would perform each of the acts, tirelessly and consistently.¹⁴

As the theater rotates from scene to scene, the audience gathers the story of progress told through technology and electricity. In the first scene, a father sits in the middle of his turn of the century kitchen and talks about the marvels of modern technology, such as indoor gas lamps and a hand pump for water in the kitchen. This sets the stage for the next scene, where the same fatherly character now sits in a kitchen set in the 1920s. He still extols the virtues of technology. This time, however, electricity plays a central role as he shows off his home's electric lights and sewing machine. As the theater turns again, the third scene plays out in the 1950s, with the father now seated in a kitchen from that era. Again technology has advanced and the father discusses such modern marvels as the television and electric dishwasher. The final scene is set in a living room which is contemporary, but with a few cutting edge flourishes. In the original version, the modern family was envisioned as having a computer in their house.

At the end of the presentation, the theater would rotate to the final position, and the audience would unload. From there, visitors travelled up an escalator to view a massive scale model of the city of the future, and were invited to examine GE's home of tomorrow. The story of progress that began in the theater concluded in a show room. At the end of the World's Fair, Disney moved the theatrical portion of the attraction to Disneyland, where it resided from 1967 to 1973 as the Carousel of Progress. In 1975, the

¹⁴ Audio-Animatronics (AA) is the name used by the Disney Company to describe their robotic attractions. The first AA attraction was the Enchanted Tiki Room at Disneyland. The New York World's Fair saw Disney implementing AA technology in all four of the attractions it designed for the fair.

Carousel was relocated to Walt Disney World in Orlando, Florida, where it remains to this day.

It's not hard to imagine why GE wanted their presentation of progress placed in a domestic setting. After all, from the very beginning, the show was planned as an attraction that would be visited by millions of people. And what better commercial for a company with divisions that manufactured household appliances than to cast the company in the light of a leader who made living easier for the average American consumer?

How Disney's designers took the notions of progress and the American home and made them fun, however, deserves additional attention.

Because the Carousel was presented as a theatrical show, it is tempting to simply place the locus of the entertainment inside the artistry of the show—the characters, the dialog, music and sets. And while this certainly drives much of the charm of this attraction, it does not adequately account for the two most novel aspects of the show—the rotating theater and the robotic performers. These elements, as dominant as they are in the conception and enjoyment of the ride, have taken a secondary role in the analysis of its success.

One of the Carousel's lead designers, John Hench, explained of the attraction: "As designers, our quest is to provide guests with a 'real' sensation. In this attraction, our aim was to create an environment infused with charm and a feeling of reassurance. I presented the newest home technology in a warm setting...."(Hench and Van Pelt 2003, 6)

This comment seems particularly ironic in light of the obvious artificiality of the performers. If a theater audience must suspend disbelief to enjoy the actions of human actors on the typical stage, then the Carousel visitor is asked something different—to suspend disbelief, but also appreciate the artificiality of the robotic performers. In this light, Hench's claim to a 'real' sensation suggests a clear understanding of the is/not is of the fun construct. The audience enjoys the performance in part because it is fully artificial. But this artificiality is provided in the context of something that conjures a certain kind of authentic. The audience easily believes that "people used to live like that," even as the toy-like qualities of the presentation refute the claim.

Here the themes of progress and home provide additional layers of meaning available to the viewer. Since the Carousel of Progress announces its intentions to define and celebrate the notion of progress, the robots on stage are seen in this context. AA technology is a marvel all on its own and is meant to be perceived as such. The artificiality of the performers provides the source of their appeal. But, as Hench points out, the domestic setting scales down and warms the impersonal aspects of the robotic entertainers. We see the awkwardly gesturing father as a life-sized toy set down in the kitchen for our pleasure and amusement. Just as Hench suggested, the potentially threatening notion of technology and progress is made reassuring and charming through the coloring of the home then enframed through the context of the is/not is of fun.

In this way, the performers who are not performers, seated in a home that is not a home, provide an assembly-line theatrical production that is, of course, something not quite a theatrical production. The ambiguities introduced by the AA actors in this attraction remain appealing almost 50 years after they were created.

What is most distinctive about the Carousel is, of course, the construction of the theater itself. While the design might have been in part due to audience throughput requirements, the design of the rotating structure turns the theater experience into a ride and a metaphor for progress in and of itself.

Though the audience rotates counter-clockwise, the effect for the viewer is that each scene crawls in from the right side of the stage to the left—clockwise. This motion cements the notion of moving forward in time, just as the setting of each act moves forward with the audience.

The moving theater also echoes the same technological progress as the AA figures on the stage. The mechanical building that processes guests like parts in an auto factory contrasts with, or contradicts, the traditional role of the theater as a place of escape, wonder and joy.

This formal arrangement of the theater is implicit in its design. As Hench remarks,

“Form gives power to the imagination and when the form fits the story, guests can transcend their everyday experience, enjoying new ideas, new vistas, and the possibilities these forms suggest.” (9)

Again, Hench points to the is/is not context implemented as architecture. Audiences move through a queue to load into an entertainment machine. And an otherwise potentially terrifying metaphor for inhumane capitalist processing of people mutes when the stage lights come on and the vision of the home dances in front of their eyes. Then the building as machine moves you forward, progressing.

Like an audience at the cinema or the theater, the Carousel audience participates in a form of voyeurism. The domestic setting of the Carousel, however, emphasizes that

we are peeking inside the private life of some family, and at times, the performances suggest that the actors are unaware they are being observed. Further, the motion of the theater as a ride evokes a subtle form of audience agency not typically felt in the cinema or theater. While both the story and the theater itself are on rails¹⁵, the motion gives you a sense that you, rather than the activity on the stage, is in control. This notion seems peculiar. But when looking at the question of point of view and narrative in videogames, we find a place to examine the phenomenon in more detail.

“Rails” is a term used in games to describe any game that forces the player along a pre-scripted path. In older 3D games, this often manifested in titles where the player could look around the world, but was driven through the environment on a controlled script. In the classic game *Pokémon Snap*, the player was placed inside a cart, much like a theme park ride, and the challenge was to snap photographs of creatures as the ride passed them by.

In the case of *Snap* and other games that put the player on rails, the feeling of control was muted, but not fully replaced. You could still look (or shoot, as often is the case) wherever you wanted. And any loss of agency by being placed on rails was only felt in relationship to games that did not use rails.

With the *Carousel of Progress*, however, the opposite is true. Simply being placed on moving rails increases the sense of agency, of being in control when compared to the usually static theater configuration where the sets on the stage can move, but not the theater itself.

¹⁵ Literally in the case of the theater which turns on a system of railroad tracks.

On this point, it is critical to note that the audience moves, and not the stage. If the stage moved, this sense of agency would have dissolved.

The Carousel of Progress itself becomes a fun house through a careful balance of progress and technology gee whiz and comforting images of domestic happiness. It derives much effect from its moving theater and robot actors, but gives audiences a new-found form of agency through the construct of the ride. A fun house, in this case, is built out of active participation of the visitor (however illusory) and authentic artificiality at every turn.

The Haunted Mansion

A standby of the carnival circuit, the haunted house ride reaches a special kind of perfection under the yoke of Disney design.

Writing about Disney architecture, Beth Dunlop exclaims: “Of all the arts, it seems somehow most unlikely that architecture could have a plot.” Still she conclude that “At Disney, every architect must turn storyteller....”(1996, 13) With the Haunted Mansion, a particular compromise between story and architecture was reached, generating lasting appeal for the ride.

In “Designing Disney Theme Parks”, Karal Ann Marling describes how the original plan for the Haunted Mansion was to include a rich ghost story told through the sequence of the ride. The structure of the attraction’s ride vehicle, the “doom buggy”, allowed each two-person vehicle to rotate on the track, directing the rider’s attention toward scenes and vignettes inside the ride building. However, the eventual design of the ride settled on a series of unrelated scenes allowing the “intrinsic power of the

architectural space” to play a significant role in the attraction’s enjoyment. (Marling 1997, 113)

Unlike the Carousel of Progress, the Haunted Mansion created a linear non-narrative, open to interpretation by the rider and, as a result, providing more agency for the visitor. The ride’s “story” is really a sequence of vignettes, each carefully staged and transitioned between. But the notion of a narrative arch or even simple tale evaporates into a spatial experience, an exploration of the parts of an antebellum mansion—entry way, ballroom, attic, yard and crypt. Even though the structure of the ride takes you on a prescribed path through the environment, each visitor is left to visually explore the creative special effects and sets and to construct a coherent story. The fact that the guest of the Haunted Mansion is never a passive viewer is cemented during the final sequence in the ride, where hitchhiking ghosts seem to appear in the ride vehicle with the passengers.

The Mansion also helps clarify the notion of agency in a theme park ride. As Rex Everything noted of the attraction,

“The Doom Buggy ride format used in the Haunted Mansion – a shell shaped car for two that rides on tracks and can rotate to face any direction – was considered a great advance in ride system technology in the middle 60’s, bringing the 3D ride experience nearer to, of all things, the 2D film experience.” (Howland 2004, 13)

The agency the rider feels, in this case, is in relationship between the theme park ride and cinema. Just as the Carousel of Progress picks the audience up and whisks them out of the expected theater role of the passive and static audience, the Haunted Mansion perfects this technique by giving the rider the chance to feel like the interactive participant in the fantasy of film. The Doom Buggy may pan and cut between scenes. But

the rider still gazes with intent and a feeling of control, at whatever they want in the fully realized architectural space. Architecture and cinema come together in an interactive combination that preludes what will eventually become the interactive cinema of the videogame.

Further, where the Carousel of Progress used domestic fantasy to reassure, the Haunted Mansion does the opposite. While the ride is often considered mild in terms of its potential to frighten, the entire experience plays with the notion of what a home, and even human space, should be to create feelings of the uncanny and even dread. This is the *unheimlich* made directly entertaining in a way that questions whether or not the unhomely is ever fully divorced from entertainment or, more relevant to this project, from fun.

Perhaps most famous of the Mansion's many spatial distortions is the stretching room guests encounter at the beginning of the attraction. After being ushered into a gloomy octagonal waiting room, visitors notice that the room lacks any obvious doors, and that the paintings on the wall are growing longer. Whether the room is moving down to achieve the effect (which it is) or whether the ceiling is lifting higher is not easy to discern. What is clearly un-nerving is the feeling that the solidity promised by polished wood paneling in the room is undermined by a visual trick that makes the room appear entirely elastic.

This teasing sets up many of the optical illusions and tricks that put the rider into a continued state of mild ilinx. The vertigo is less that of feeling dizzy, but of having a loose sense of how the usual spatial expectations of "real life" apply inside the attraction. This warping of space continues throughout the ride with doors that bulge like elastic as

something appears to push from the other side, endless hallways, wallpaper that features leering devils rather than typical Victorian filigree and hallways that unwind like ribbons. Once the ride takes visitors up through the attic space, the ride vehicle turns backwards, as the track descends from the top story of the mansion into the graveyard below. This movement is particularly un-nerving for two reasons. First, riding backwards while simultaneously going down generates a sensation of falling. Second, the outdoors scene that slowly tumbles into view is clearly still within the ride building. This outside that is inside is fun, but also quite uncanny.

Ultimately, the story of the Haunted Mansion is one of vertigo—of the unhomely. Unlike the roller coaster, the ilinx of this ride is one of narrative—of fragments of story told in pieces, and the pieces then put in play. Ultimately, the agency the ride affords through its fragmented narrative and swiveling theater-like ride seat provides a low-grade form of interaction. This interaction on rails sets up an emotionally engaging trip through a story space that seems so real that you want to jump into it. Of course, just as the urge to leave the ride to explore the upside down world of the Haunted Mansion grows to its peak, the experience is over. A final effect as guests exit the attraction features a ghostly apparition urging guests to come back soon. The ultimate interactive act is for Haunted Mansion visitors to quickly decide to ride again.

Mickey's House

In both the Carousel of Progress and the Haunted Mansion, the ride system works for visitors because it gives them a feeling of participation or agency in the attraction. By becoming a rider, rather than simply a passenger, the visitor is allowed special access to the fantasy of the setting. The ride mechanism privileges the rider and makes them a part

of the fantasy that they visit. In this sense, the rider is never quite the tourist, never quite the audience even though they are certainly both.

Mickey's House, on the other hand, works in a more traditional mode as a tourist site, meant for sightseeing. Even though the nominal home of Disney's most recognizable icon is a walk-through feature, allowing guests control over the rate of the exploration, the house is among the least satisfying locations to visit in Disneyland. In many cases, guests come to Mickey's House not so much to take a peek at his home but, instead, as the most direct path to a photo opportunity with the mouse himself at the end of the attraction. In his way, the Mickey Mouse house is much more of a themed line than an attraction of its own. If nothing else, this attraction provides a goal to its engaged participants as meaningful as saving the world in a videogame. Mickey's House illustrates the power of a goal to motivate use.

Mickey's House was introduced in Disneyland as a part of the Toontown expansion in 1998. For most of its history, the Disney Parks had been relatively indifferent to the idea of creating a home for their famous mascot. But once the attraction was built, it did attract crowds happy to have a guaranteed photo opportunity with Mickey. While other costumed characters randomly roam the park, or host limited meet and greet opportunities, Mickey's House maximized the number of guests who could meet the mouse by staffing multiple encounter rooms manned by rotating Disney cast members in many mouse costumes.

In an effort to meet visitor demand for the archetypical souvenir, Disney designers concocted a fantasy home for their fantasy mouse. Mickey's House, whatever its limitations as a theme park attraction, remains firmly anchored in the is/not is of the

fun concept. Mickey's House may not be a ride, but it is a monument to the central fantasy and fun of Disneyland.

Seen as a machine for generating fun, Mickey's House lacks much in the way of anything to do, and without the ride component, visitors return to a more real world interpretations of the many props and sets erected to create the image of the mouse's home. The Disneyland Encyclopedia describes it as a form of "museum", although more appropriately it is a fantasy museum filled with visual trivia offered to the Disney fan to decode. For example, images on the wall and props throughout the house reference classic Disney cartoons and characters. Puns such as a book on the shelf titled "The Random Mouse Dictionary" provide a reason to carefully consider various items in the walkthrough scene.

This approach to detail provides the visitor with an architecturally implemented system of rewards. Much like the "hidden Mickey" phenomenon, discovering the puns, the references and the inside jokes (not to mention the hidden Mickey's in the house) provide another reason to enjoy a visit to this home. This system of visual rewards is embedded in a specific meta-narrative of Mickey Mouse and Disney. And because this story must be brought with the visitor to the home, the rewards only operate for those that have enough of the story in mind to understand the context. Mickey's House is oddly narrative free considered in this light.

For those unfamiliar with Disney lore, either because of age or indifference, the house still presents a form of ilinx similar to the Haunted Mansion. The architecture of the house is often described as "bulbous" where the rectilinear forms of the traditional American home undulate in a softer, cartoon form embodied by Mickey.

This is certainly no coincidence. Walt Disney originally designed his iconic mouse with round shapes to make him more appealing. This design principle led to significant issues during the building of Mickey's house for trades people unfamiliar with construction modeled along the lines of these curvy lines. Never-the-less, the house was built in solid form with the shape of bubbles, balloons and pillows. And not only is this a house that is not a house for a mouse that is not a mouse, it is also a material object that contradicts its own materiality. The building, with its material and formal disruptions and playful lines, even without the narrative, still speaks to fun.

Disney at Home

Guests who stay at one of the many Disney owned hotels on the expansive Walt Disney World property are greeted with a peculiar claim as their bus pulls up to the hotel entrance:

“Welcome home.”

Clearly, Disney designers understand the reassurance and comfort of the image of the home. Claiming, without guile or a hint of cynicism, that a small hotel room at a resort property is any way a home only cements the idea that our notion of home is portable, fungible and contextual. It also shows that the idea and the image of the home are deeply rooted in Disney theme park ideology.

Looking at the Carousel of Progress, the Haunted Mansion and Mickey's House provide a glimpse into how the notion of fun easily cooperates with the notion of home. Fun can emphasize the reassuring notion of home, as it does in the Carousel, it can contradict it as it does in the Mansion or it can simply play with it as it does with Mickey's House. At each turn, our notion of home both allows for the ambiguity of play

that creates fun and becomes a clear is notion for the Disney designers to play the is not off of.

Ultimately, the value of looking at how a theme park treats the notion of home is to better understand how notions of domesticity work in the context of fun. Rather than see the fun house as folly, some sort of misguided transgression, the view from Disneyland suggests that a homeowner can have some fun with where they live without destroying the core comfort of the domestic. As Disney clearly shows, the contingencies introduced by fun may challenge our ideas but it does not consume or destroy them. Clearly, if Disney destroyed our notion of home, there would be no comforting hotel to return to, no nostalgic notion of home to pine for, no comforting notion of home to create an uncanny home to contrast and no tradition of home to joyously toss up in balloon animal play.

Britannia Manor

Play house

Perched atop a high point in the Austin Hill Country sits Richard Garriott de Cayeux's home, Britannia Manor Mark II. The playground of this well-known game development pioneer has provided the setting for many famous and infamous Austin events and, in every sense of the word, was built as, and remains, a fun house.

While the home has functioned for many years as Garriott's primary residence, and in this sense is no different than any other American home, it was designed from the beginning, and continues to evolve a variety of special features designed to inspire play and wonder.

According to real estate records, the three bed room, five bathroom house covers 5,900 square feet of living space on a 3.99 acre lot. From the outside, the house is

relatively nondescript, though attractive, stucco on wood frame construction home.

Except for the presence of a silver observatory dome resting atop a three-story square tower, the home might pass for any other tasteful home in this upscale Austin enclave.

But to those who know Garriott or his work, also know Britannia Manor Mark II is far from ordinary. In addition to housing an ever-growing collection of esoteric and unusual artifacts and collectables, Garriott¹⁶ designed his home with a variety of features meant to amuse himself and his guests. Since its construction in 1988, Garriott has constantly expanded the property, including the home, the buildings on the grounds and the grounds themselves.

And like the games he designs, Mark II can itself be understood through the lens of play and fun.

Background

The son of Skylab astronaut Owen Garriott, Richard Garriott was raised in a world where the extraordinary was ordinary. He tells stories of his father bringing home technology from NASA, such as early prototypes of Polaroid cameras and night vision goggles. Meanwhile, his mother involved the Garriott children in annual journeys through different areas of the fine arts—from silversmithing to pottery.

During his senior year in high school, Garriott created Akalabeth, a hobby project he programmed on this Apple II computer which simulated playing the game Dungeons and Dragons in a 3D, computer world. Through a series of fortune events, Garriott's pet

¹⁶ Prior to his marriage in 2011, Garriott legally changed his name to Richard Garriott de Cayeux's, appending his fiancé's last name to his own. This allowed his wife to take his last name without sacrificing her own. According to Garriott, his French wife's nationality required she either keep her name or take the name of her husband, but not to hyphenate. In this case study, for convenience and clarity, Garriott de Cayeux will be referred to simply as Richard Garriott or Garriott.

project became an early computer game hit. Over the intervening years, Garriott grew his stable of successful games through the Ultima franchise, eventually creating one of the first successful online role playing games with Ultimate Online in 1997.

Early and sustained success in the videogame business earned Garriott a small fortune and the opportunity to pursue his interests at notable scale.

In the years since his videogame success Garriott has attained a number of notable accomplishments. Most impressive is perhaps his journey to the International Space Station, making him the first second generation astronaut (and costing him the majority of his personal wealth—roughly \$30 million). But it is the construction of his Mark II¹⁷ home along with the subsequent events he has held there that seems to capture the public's imagination. In 1998 he started work on Britannia Manor Mark III on 30+ acres of lakeside property near his Mark II estate.

"I'm really not just satisfied building virtual experiences," he said.¹⁸ In fact, Garriott has a long history of constructing haunted houses, first small productions for friends and family and later, after success in the videogame business, increasingly elaborate experiences costing thousands of dollars and employing large casts of volunteers. (King and Borland 2003) Garriott connects his lifetime desire to construct experiences in material forms to another famous builder.

"I kind of liken myself to the woman that built the Winchester Mystery House in California, because I am always, always, always building somewhere."

¹⁷ The original Britannia Manor was built in New Hampshire and did have some unique features, including a tower jutting out from one corner of the house containing an indoor rain system, staircase and a Jacuzzi.

¹⁸ In January of 2012, I was invited to take a tour of Garriott's home as a part of the current research. All quotes and additional material from this case study are from the research and field notes from that visit. Material from other sources is cited where necessary.

Appropriately, Garriott sees his urge to build and create in the context of another well-known folly site. Although, perhaps unlike the stately window of the Winchester fortune, Garriott relishes the idea that the future might judge him as the builder of a set of crazy, impractical, folly houses.

“In some strange way I would enjoy that legacy.”

With his background as an entertainment designer, Garriott connects with the folly tradition as a form of architecture set outside the mainstream for the purpose of delight. Rather than see this outsider status as a negative, he embraces it.

As an amateur designer of architecture, Garriott drew plans for his home on graph paper and then worked with Austin architect Alan Barley to convert the drawing into practical designs and building plans. The inclusion of an architect in the design and build process of Mark II was motivated, at least in part, by the experiences Garriott had while designing and building his first Britannia Manor in 1984.

“Britannia Manor Mark I, I designed myself on graph paper, literally, and I took that to a builder and I said, I would like this house built. And as much as I loved that house, it had exactly no closet space, there was no way to store stuff. And getting furniture up and down into the master bedroom was all but impossible because of the curves that I made in hallways. To get up there made it such that large things like headboards really had no geometrical way to get up to these areas.

“It was a great house, but it was shockingly impractical in many ways.

“So for this house (Britannia Manor Mark II), I also designed it on graph paper, but as opposed to going directly to the builder, I hired a young, up and coming local architect. And I said, ‘Here’s my plan, please fix it.’”

From the unique experiences of his childhood, his early success in the game business and initial attempts at fun home building along with a lifetime of haunted house construction, Garriott arrived at Britannia Manor Mark II.

Features

Until his 2011 marriage, Mark II remained Garriott's primary residence, his home. Since his marriage, he has undertaken construction of a New York City residence dubbed, temporarily, Britannia Manor Mark IV, he will share with his wife. This coincides with the listing of Mark II for sale at \$4.1 million; a number Garriott said would enable him to complete construction on Mark III.

Because Britannia Manor Mark II was designed with specific fun features, and because, at the time this research was conducted, major modifications of the home had ended¹⁹, the following list of features accurately encompasses the appropriate architectural aspects of Mark II as a fun house.

Site

A house could be, hypothetically, constructed almost anywhere. For Garriott's fun house, the plans started with selecting an appropriate site.

"I started with a topographical map of the city of Austin and looked for the highest available hill top. And this is the highest point between here and the city," he says, gazing from his yard toward the Austin skyline.

The low, rolling hills and lush foliage of the Austin hills make it difficult to easily spot a high point in the terrain. Garriott explained that he located the site for Mark II by consulting topographical maps, selecting an obvious high point near the city. Assembling several parcels of land, he erected scaffolding on the property to determine where the best sightlines on the property would sit. By situating his home at the apex of the hill, he was

¹⁹ Garriott does note that building on the property continues, with a recent conversion of a workshop into an office.

able to realize 360 views from the highest points in the house—creating unobstructed views to the horizon in every direction.

From the very beginning, Garriott considered what would make his home unique and provide a unique experience for its visitors.



Figure 6: Britannia Manor entrance, with observatory dome visible.

Observatory

As a unique feature, Mark II's observatory dome presents itself boldly. ([Figure 6](#))

The appearance of the distinctive retractable dome of the observatory on top of the building signs that this home is different, unique, and perhaps idiosyncratic. The

gargoyles atop along with flags fluttering from the observatory tower take on new significance. There is something special inside, something hidden.

The context of the observatory further interprets other features—the twin cannons peeking from flowering bushes in the front yard, the small island with a diminutive pagoda surrounded by a lagoon (which improbably exists on a hill formed from geological layers of uplifted stone) and a small carousel. The external architectural details are subtle. But taken together, and oriented around the clearly visible observatory tower, start to create a story of architectural difference.

The home's front door enters through the base of the observatory tower, opening into a small foyer. A short hallway leads forward toward glass doors entering into a pool area while twin stair cases to the left and right lead to the second (and main) floor of the home. Looking up in the interior of the tower, a ship's ladder ascends from the second floor into the third story observatory platform. A brushed steel frame supporting the observatory platform is exposed and on the walls Garriott has hung medieval weapons—swords and crossbows. The effect is of entering an ancient keep rendered as a modern home. The formal organization of the space is somewhat unusual—sending visitor up one of two staircases or down a hallway to discover what the house may hold.

On tour, Garriott points out that to construct the observatory tower, he defied the experts he consulted who told him that the project was not feasible—vibrations from the home and the tower would render astronomical observation of any accuracy impossible. Undaunted, Garriott took a telescope onto the decks of various parking garages until he found a construction stable enough to support his observatory plan. Mimicking the

engineering of the parking garage, he isolated the home from the superstructure of the observatory tower, ensuring the isolation of the observation apparatus.

The story of the tower's engineering, otherwise unknowable from the mere facts of the room, become an important point of orientation for the remainder of the tour. The material facts anchor narrative at every turn.

Grotto and Pool

Due to the Texas heat, a pool often shows up as a common feature in many homes in the region. And while the Britannia pool is somewhat unique—featuring a standard diving depth across its length allowing people to leap from the second story balcony into the water and featuring an underwater window facing the backyard lawn, the attached indoor grotto provides its most unique feature. Connected via an underwater tunnel, the grotto features a small extension of the pool inside an enclosed courtyard. Shower nozzles placed in the roof of this courtyard allow for a gentle hot or cold rain to pour down, and with the flip of a switch a waterfall cascades across a rock wall into a hot tub and covering the entrance to a grotto cave. Stepping stones allow visitors to pass across the indoor portion of the pool and past the hot tub, out of the enclosed courtyard and onto the backyard pool deck proper.

This tropical simulation was inspired by a similar indoor rain feature Garriott saw at Hammond Castle in Gloucester, MA, a notable folly in its own right. And the Mark II version of the rain room is one feature he borrowed from his Mark I design. Garriott notes that the grotto area remains one of his favorite in the manor, and often plays host to

various games, such as a form of water volleyball played with beach balls and bubble bath.



Figure 7: Waterfall and grotto pool

Medieval Hall

On the entry level, past the grotto and past two small bedrooms lies a long hall that terminates in a stout wooden door on large iron hinges covering an arched portal. On

the walls fake candles flicker making the passage way feel somewhat like something, out of a castle. Not surprisingly, Garriott calls this the Medieval Hall. Noting this hallway acts as a transition to a “darker part of the house,” Garriott once considered this as one of the major features of the house. As the scope and scale of the other features in the house developed, Garriott now notes he considers this part of his home as “rather normal.” Most notable about the hall at this point is time is his collection of rare drawings and notes from the father of space travel, Konstantin Tsiolkovsky.

The Study

Behind the door on of Medieval Hallway sits a two story study. Visitors enter the study on a second floor balcony, looking down to the first floor of the study below. A large stained glass window (artificially illuminated since it faces an interior wall) dominates one wall of the room. Display cases and shelves line the walls, filled with more artifacts and collections—most notably a large brick Garriott claims came from the Great Wall of China. And, most notably, there is no obvious way from the balcony down to the study. No stairs. No ladder.

By moving a ceramic sculpture (which Garriott points out was created by his mother) across the surface of one the shelves, tracing a specific path over 18 magnetic sensors mounted in the wood, a hidden passage way reveals. A distinct click indicates that the panel at the end of the study balcony has unlatched. Where once a blank wall stood, now gives way to a small door. Entrance through the portal brings the visitor into a tight, 5’ by 5’ square tower that climbs from the ground floor of the building to the top. Inside the tower is a set of spiral stairs. The walls are adorned with more fake, flickering

candles, plastic cobblestone and a ghoulish gargoyle relief that Garriott explains were wall treatments left from one of his haunted house events and never removed.

From inside the secret stairway, Garriott points to more secret doors that open into one of the bedrooms and the kitchen. Following the staircase down, visitors access the main floor of the Study, the Wine Cellar and the Dungeon. The secret staircase connects to another series of hidden passageways in the attic space, allowing Garriott to access almost every room in his house from some hidden door.²⁰

The first floor of the study contains more of Garriott's collections. Scientific instruments, Tesla coils and a stunning collection of orreries provide a more Victorian theme for the room. Noticeably, this study lacks either chairs or many books. It is a study in name only. In practice, it is a room for housing a series of collections and showing off of collections to visitors.



²⁰ One bedroom Garriott jokingly calls the “safe room”, because it is the only room in the house not accessible via secret passageways

Figure 8: The study (viewed from second floor balcony, with Medieval Hall entrance to the top and left and the secret door to the bottom left.

Secret Passageways/Secret Space

Next to the study, a small wine cellar provides more secrets. Cabinets along two walls, meeting in the corner, provide a gap that Garriott has turned into useful space.

“And that’s really common in almost every room there’s dead space if you have built in cabinetry in the corner. Like in your kitchen there is constantly dead space people are trying to figure out a way to access. In this house—secret passageways.”

He demonstrates this by removing a small panel in his wine cellar’s corner cabinet. Behind the false door he reaches into the dead space created between the two cabinets on abutting walls and removes a few bottles of beer. On the home’s main level he demonstrates a similar configuration. Behind his television and home entertainment is a “media garage”. The purpose of this rear access space is to provide an easy way to reach the back of home entertainment components and to better manage wires and cables out of sight of the living areas. Garriott’s unique take on this access space is to place a mirror over the entrance to the space, again creating a secret door to a secret room. This rear access space, because it is sandwiched between the living room and the kitchen, also gives access to the corner dead space in the kitchen.

“You kind of get the idea that there is a constant search for where can we put one more secret?”

The secrets of Britannia Manor relate closely to both Garriott’s interest in magic and in games. Trapdoors and physical illusions work as well on the magician’s stage as in

the house. Only, the effect is reversed. In a magic trick, the impossible happens before your eyes, and the mechanics of the trick remain secret. In Britannia Manor, the trick is not obvious until the secret is revealed—such as opening a hidden door.

The structure of the is a door/ is not a door works within the defined framework of fun, in the same way that magic's impossible/actual contradiction frames the fun of a magic show. Likewise, in games, the designer constantly works to create something believable out of the immaterial code of the game. Making something appear where there is nothing is more than sleight of hand in Garriott's design world.

Garriott's home, as in a magic trick, plays with intentionally ambiguous boundaries to create fun effects. His indoor pool area that pretends to be outdoors, doors that pretend to be walls, and lost space reclaimed through hidden panels provide an ongoing argument in the house that things are not what they seem. Garriott points to a panel in the study and laughs as he talks about visitors who constantly check to see if it is, in fact, another door. In fact, it is simply a panel on the wall.

With ironic delight, Garriott sees fun when the context of his house suggests that an ordinary panel is extraordinary.

Dungeon

Originally more of a crawlspace resulting from the slant of the hill under the house, Garriott eventually excavated a small room creating his dungeon. Access to the Dungeon is reached through the secret stairwell (and by an unobtrusive door letting out to the side yard). The room is playfully creepy with dark wood paneling and more faux cobblestone on the walls. A large coffin dominates the center of the room, complete with a human skeleton. On the walls more display cases, art and a series of tomb markers for

famous people such as Shakespeare and Mozart. Behind one the false markers, another magnetic switch reveals a safe, behind another a secret space filled with more artifacts.

“The Dungeon is where I began to move all the dead things.”



Figure 9: The Dungeon

The Collections

The Dungeon's collection of dead things and morbid items and the Study's downstairs collection of scientific instruments provide more heavily themed spaces for Garriott's many collections. But the collections themselves define many of the spaces in the house: The Magic Room, The Space Room and the Automata Room. Even when entire rooms have not been given over specific collections, individual display cabinets invariably have been organized according to themes—fossils and adventure travel for example.

Garriott's wide ranging collections conjure up images of a Renaissance wunderkammer. His cabinets of wonder and entire rooms of marvelous collections provide a key frame of reference for understanding the home.

“The house is the big cabinet of curiosities. That is an accurate description.”

This point is made even more clearly when examining Garriott's collection of automata.



Figure 10: Collections in the Space Room, including Garriott's spacesuit from his visit to the International Space Station.

The Automata Room

In a large room over the detached three car garage, Garriott houses one of the world's largest collections of automata. These mechanical dolls, toys, sculptures and miniature scenes fill the room, forming a small museum dedicated to the history of the form. And for Richard Garriott the computer game developer, these entertainment machines hold special meaning.

"If you think about what these people are doing, these people are using gears and pullies to similarly create an animated story like we do in computer games. To my mind, these are the mechanical analog to the electronic storytelling that we are doing."

In fact, as Garriott tours visitors through his home, the various features—including the collections—become the material from which he can tell tales, narrate an experience in a manner similar the role he plays as game designer. Seen this way,

Britannia Manor works as a set, but like the automata themselves, an interactive set designed to engage, entertain and delight the viewer. More than a wunderkammer, Garriott's home is a sort of automata—a machine designed to generate wonder.

“That’s exactly right. I’d be happy to have all these things built in,” he states. Interactive, narrative, tangible, delightful, surprising, his automata provide in small form a vision of Garriott’s pursuit of wonder. And true to the claim that games are machines for generating fun, the automata he collects revel in their machinery and mechanistic ability to produce fun. Likewise, his claim about built-in automata points to limitations he sees in the design of Britannia Manor. Despite its many features, Garriott somehow laments something missing in the design of the house. This missing quality can be better understood in terms of his Britannia Manor Mark III, to be discussed later. In short, Mark II doesn’t go far enough as machine for generating fun.



Figure 11: Automata Room

The Home as Home

“I still enjoy the magic of it. But it’s not like I come through here and I prowling around when I’m not showing it. I do go around and fix things when I am not showing it, which is a truly endless task.”

While Garriott’s home functions as a machine for entertaining guests, it also has long functioned as a residence. Kitchen, bathrooms, bed rooms and a living room—the organization of the primary living space remains conventional. Looking at the kitchen, for example, short of a set of secret passages in the cupboard and a large wall hanging of Neuschwanstein, the room is a tasteful and functional area for preparing and eating food. There are no ghouls in the refrigerator, no special effects built into the cabinets.

“When I come home, I just think of it as home. I don’t think I am coming home to the amusement park. But I feel very at home with these things. Like, I don’t think of the Dungeon as a scary place to go. I don’t think of the cabinet of wonders as to be a continual form of wonderment. For me the wonderment was the identifying and acquiring and building into them. And my sense of wonder re-emerges when I get a chance to show it.”

Britannia Manor the home paradoxically exists in the same space as Britannia Manor the stage for entertainment. And while this duplicitous relationship might not seem surprising, it does explain much of the appeal of Garriott’s home. While the majority of domestic places function more or less according to the normative script of an American home, Britannia Manor functions both as a home, and as something else. The ambiguities or contradictions all service the idea that Garriott’s home is a fun place.



Figure 12: The Kitchen

Building as Game

Unlike the other sites in this collections of cases, Britannia Manor acts as a both a site for play and as a home. If Britannia Manor is a fun house, then it must function as both a machine that generates fun in its visitors and occupants as well as operate as a home. In terms of the over-arching notion of ambiguity this study has attached to the fun concept, Britannia Manor must function as a house and not a house, as an attraction that is not an attraction.

And, of course, this is exactly what it does. Because while the norm of domestic habitation seem to resist anything that diminishes the image of the home and home life, Garriott's home functions well at the margin—acting as a house as it needs to, acting as site for fun when the opportunity arises.

This dual nature of the house might look like a threat to one or the other of the uses. However, the building seems able to accommodate both with ease. In this sense, Mark II seems to function like a pervasive game—blending fact and fiction, real and imagined uses into a single place.

Stenros, Montola and Mäyrä describe the pervasive game as,

“Games that expand spatial, temporal and social boundaries of traditional games....Usually games are played by certain people, at a decided time, in a set place. Pervasive games bend the contract of gaming regarding at least one of these characteristics.”(Stenros et al. 2007, 30)

If the magic circle defines how the classic notion of games sets them outside of ordinary life, the pervasive game sees games as a set of related actions that can happen without this clear demarcation.

What the pervasive game notion shows is that games can continue to operate as fun machines under a much looser set of conditions than much of the game literature would suggest. When it comes to a home that also operates as a fun place, pervasive games provides a mechanism for understanding how the site functions on both the domestic and fun registers without clear definition between them.

Just as a pervasive game might take place on the active streets of a busy city, so can Britannia Manor slip in and out of its roles as context for domestic life and context for play.

Narrative

Many visitors to Garriott's home come for a tour. With Garriott acting as the guide, visitors are led through the home, from feature to feature, as Garriott explains different parts of the house and, more importantly, stops to describe items from his various collections.

“I don't collect things because of their value; I'm not investing in it. I collect things because you can go, 'What is this?'" Later he adds, "There're stories about every object in here."

Garriott travels his home from story to story, object to object, cabinet to cabinet.

While the original wunderkammer may have worked as a system to validate the

authenticity of the collected items and demonstrate the power of the owner, Garriott's wunderkammer serve a different purpose, and one closely related to fun

"They are all means to a similar sense of wonder, the cabinets of curiosity, or I think cabinets of wonder is another term that has been used. So, for me they are all the sense of wonder. They are all this, 'How do you get downstairs from that balcony? Surely you don't expect us to jump, ha ha. That's ridiculous. There must be a secret passageway somewhere.'"

Wonder is delight. Wonder is discovery. Perhaps most important of all, wonder is the impulse that drives inquiry. For Garriott, the performances in his house, and of his house, focus on the creation of wonder.

Britannia Manor Mark II is Garriott's interactive stage for a performance he clearly loves to give. When he shows a case of fossils, the story of the fossil's acquisition and the greater scientific tales they tell take precedence over the small, non-descript bedroom the display occupies. In the same way a theater set only provides enough detail to frame the performance, Garriott's home, despite some of its more unique features, remains a minimal theatrical set, a place to spatially arrange stories told in objects and to house objects for future narration. In this sense, Britannia Manor is a stage designed for action—much like a videogame, or maybe like watching someone play a videogame.

The house as a home, then, overlays and interleaves the fun house. When not operating as a stage and set for one of Garriott's many parties, events and interviews, the house returns to a home. The kitchen functions as a kitchen. The bathroom operates normally. The house features comfortable furniture and a place to park cars and watch television. Garriott has not taken any steps to disrupt the daily domestic tasks.

Inside the shell of the building's architecture, and in addition to the home's various fun features, the collections provide an additional layer of entities for Garriott to

operate. Specific sets of artifacts create the props for tales about visiting the space station, retelling the history of a famous magician, of tracking mountain gorillas or exploring the sunken Titanic. These specifics drive the meta-narrative which revolves around this described sense of wonder.

The automata room, as previously described, provides one of the central threads in this story of wonder. Connected to Garriott's interest in magic, natural science and exploration, the automata become a material metaphor for the center of his apparently divergent interests. In magic we see the surprise of things that are not what they seem. In natural science, he traces various histories of how we understand and make sense of the world, seeking new surprises and wonder at each step. And in his various explorations, the pursuit of wonder turns to first person experience. The automata embody each of these themes in an encapsulated microcosm.

While Garriott may appreciate many of the objects he owns for more traditional reasons anchored in history, authenticity and beauty, each objects' primary purpose is to support his narrative and his search for, and sharing of wonder.

Of course, what Garriott calls wonder is a product of the special form of play he enacts in his home, using his collections as props. Garriott may call the product of his play wonder, but that his notion of wonder is a form of fun seems evident.

At the very least, this sense of wonder has more to do with games than traditional notions of the sublime or the beautiful because for Garriott, wonder is connected, critically, to interaction.

Interaction

As a game designer, Garriott has become famous by creating worlds game players can experience. Garriott clearly understands the critical role interaction plays in the game machine, and he brings that perspective to his home.

“This house was a cheap house to build. This was not an expensive house. There are no fine finishes. These are the cheapest Home Depot carpets you can buy. We’ve already changed them three or four times. I’m tired of paying for carpet. So, cheap carpet and replace them in 5 years.” He wants to emphasize that the house itself was not built as a monument to beauty. It was built a place to stage various actions—whether themed dinner parties, wild hide and go seek contests or his famous haunted house. “There’s nothing particularly fancy as finishes in this house. It’s all meant to put your foot up on stuff and don’t worry about it. That’s the complete theme of this house.”

Unlike a museum, the modern extension of the wunderkammer, Garriott collides the set aside quality of the museum with the needs of interaction.

“I am a devout believer that even when I have kids, so to speak, there is no point in having these things if you are not using them and if you are using them you are probably going to break them. And you know what? It’s just a piece of hardware. And yes it will be a shame because often they are expensive and rare or delicate things that will not ever be seen again in the history of the world. But unless you get a chance to interact with them you can’t really absorb them.”

His home, like his games, must be interactive,

“It has to be interactive.”

Interaction remains somewhat problematic, though, Because Britannia Manor is his home and there is a sense of control. Garriott might invite the visitor to touch the exhibits. But he does not allow them to rearrange the cabinets. He remains the game master, keeping control of the fun in order to maintain the experience and the participant as player follows the rules for the same reason. For practical reasons, Garriott must

reduce the number of verbs afforded to visitors in his home lest the game exhaust itself too soon. For the visitor, Britannia Manor lacks procedural depth. But, as the owner, you can only imagine the range of possible action if you actually lived in the home.

Importantly, much like Suits role player in a game without obvious ends, Garriott runs his home as the ultimate fun house, complete with rules designed to ensure its continued operation as a fun machine.

This tension also explains one of the more peculiar features of the house—secret doors and passageways that are in no way secret. Not only does Garriott happily show the “secrets” on tour, online video of him describing in detail each secret in his house contradicts the notion that they are secret at all. But this technique of showing off secrets makes Garriott’s house interactive in a subtle way. By moving up and down the secret staircase, the visitor is given the feeling of having access to more than they really have. Knowing the secret of the hidden stairwell and being given the opportunity to take the stairs is one of the more memorable aspects of a visit to Garriott’s home. Britannia Manor, working with Garriott’s script, gives people a chance to experience something outside of the ordinary. This full body participation in the action shows the power of place to operate on a person and their perceptions, even when the actual freedom in the space is limited. In this way, a trip to Britannia is something like a ride.

But this also suggests a boundary or a limit to the fun of Britannia Manor. If you are not Richard Garriott or one of his close friends, then is the house less of a fun house? Because the procedural depth of the house as a play place is directly linked to your role in the house—visitor versus the home’s owner—the efficacy of the house as a fun-

producing machine appears to vary. Along the lines of interaction, Britannia Manor operates in a third context beyond home and fun house—as a tourist attraction.

At the least, this suggests that Garriott's home is instrumental in the general play of his life. From trips to outer space and to the bottom of the ocean, Garriott is at play. His home provides a central point of context. Like most anyone else, Garriott's home is home. Uniquely, his home is staged to support more playful pursuits and works as a modern day wunderkammer, useful for Garriott the showman to perform his vision of exploration, fantasy, imagination and wonder. But he also takes pride in the practical aspects of the house. He points out that his secret passageways do not consume much in terms of the square footage of the house. And in the case of kitchen cabinets, the secrets reclaim what would otherwise be unused space. He also mentions that these secret passageways make it easier to do things like run cables through the house. Asked if designing to be practical takes away the wonder, he says it does not.

“I think that something that is magical that is also useful is a plus.”

Value of the Folly

Architecture ultimately is left to speak for itself, the intentions of its designers and builders fading against the material certainty of what remains. Once Garriott has left Britannia Manor Mark II, what remains is a somewhat unusual house with an observatory, a secret stair case and an elaborate grotto. But, as described, Garriott himself provides much of what is unique about this house—his collections, his narration, his management of guests and hosting of parties.

This suggests that as a folly, the building itself may offer some playful features, but that the ultimate feature which makes play possible is the owner. The conclusion this

points to is the background role that Britannia Manor plays in any fun there. Without Garriott, Mark II appears to be just another house, albeit a slightly unusual house.

However, this conclusion is challenged by an anecdote Garriott tells of his original fun house, Britannia Manor Mark I—constructed in New Hampshire during the early years of his videogame company’s success.

“Britannia Manor Mark I was built right next door to my brother Robert, two lots, next to each other, both backed on a creek, both were rectangular, both on this exact same street, and both pieces of dirt were sold to us for the same price. And we both built houses of identical budgets and identical square footages. The similarities end there.”

Richard Garriott exposed his basement, while his brother left his covered according to the norms of the neighborhood, and the younger Garriott committed to a single, exaggerated feature in his house design.

“In the corner of my house I made a three story tower, a penetration, that kind of thrust out of the house—a tower in the corner of the house. It had a nice vertical stack of windows all the way up an spiral staircase all the way up on the inside of it and a platform that covered half of a floor, two floors up, that had a Jacuzzi on it. An artificial rain would rain down out of a little hose nozzle. In the bottom, on the floor was a little collecting pond for the rain and at the back of that wall was a door that went into a little sauna.

“And so I had this fun, funky little tower in the corner of the house.”

These deviations from traditional form complicated Garriott’s ability access bank financing

“I had trouble getting it built, not because it was difficult, but because banks didn’t get it. Banks thought it was ridiculous.”

Garriott’s first foray into folly building was met with the typical skepticism of the form. In order to secure a mortgage, Garriott was forced to pay out of pocket for the parts of the home the bank deemed having “zero value.” But the story had an unexpected

ending. When the two brothers decided to move their business back to Texas in 1986, the sale of the two homes provided data that exonerated Richard Garriott's playful vision.

"I sold my house for 30% more than I built it for. Robert sold his completely normal traditional house for 30% less than he built it for." In this case, at least, the folly proved to have a quantifiable market appeal.

Whatever motivates a buyer to see value in the unusual features of a building, we can only speculate. But the fact that someone was willing to spend more for the folly indicates a perceived value in these playful features and, by proxy, in the playful spirit or potential of the structure itself.

With Britannia Manor Mark II on the market during the period this research was conducted, Garriott again looks to realize a profit on his idiosyncratic designs. The bet he has placed is that his house, minus his playful input, still has realizable market value. In other words, the argument that the place itself functions as a place for play, as a fun house, works in spite of or possibly even independently of the homeowner's use or intentions. This provides a method for asking the original question invoked in this research, "What makes a place fun?" rather than asking the less direction question, "What kinds of fun things are possible in a place?"

Mark III

Currently, Garriott is at work on a new home in New York City he has dubbed Britannia Manor Mark IV—a townhouse that will eventually feature secret passageways, a dungeon and a child's room with an appropriately child-sized door. But his ultimate act of folly building remains, as of yet, uncompleted: Britannia Manor Mark III.

During his years of modifying and adding onto Mark II, Garriott realized that his ambition to continue to add to his current home had reached a logical conclusion. “I could not add without tearing something down at the same time” He began planning Mark II’s much more ambitious successor.

“If you look at Britannia Manor Mark III, it’s hopefully something that is going to get finished down the street, it is something far more unusual. It is has no accommodation for normalcy whatsoever. Whereas this house (Mark II) had to be rebuilt into a haunted house any time wanted to do a haunted house, the next house is a haunted house, permanently. You don’t have to look behind the scenes to see the unusual. It’s much more exposed. Where this one (Mark II), I already know is worth more than I put into it, the next house, you couldn’t resell it. Like the Winchester Mystery House, it has no market value.”

When completed, Mark III is planned to include the following features:

- A master bedroom with a dome. The bed sits on a riser that can lift up through the open dome, allowing you to “sleep under the stars”.
- A massive swimming pool 25’ at its deepest. At the bottom of the pool rests a treasure chest enticing divers to swim to its depth. Additionally, a small island sits in the middle of the pool.
- Underwater tunnels slanted up toward the surface allow divers to explore cave-like features without risk of drowning. The canted tunnels allow a swimmer to simply rise to the surface.
- An extensive set of catacombs links the house together with secret passages. One passage leads up a ladder to a hatch allowing access to the island in the pool.

Windows in the catacombs allow you to view into the pool.

- A special door can only be accessed by reaching deep into a tube to turn a latch.

Once the latch is turned, a pressure cuff grabs the person's arm, preventing them from moving for a few moments.

- A scare room that goes from silent pitch black to bright light and noise.

"This is the magnum opus. There is no changing it over to being the haunted house. It is the haunted house," he says.

The partially constructed Mark III sits on a large parcel of land on the shores of Lake Austin. Construction of Mark III that started in 1998 stopped when Garriott's fortunes fell with the stock market declines in 2001. Still, the property does feature a sizable marina and a collection of small cabins, a wooden fort and ship playground near the water dubbed Castleton Village. A full-sized Elizabethan outdoor theater christened the Curtain currently hosts a summer Shakespearean theater company and public performances. Garriott has also hosted an international jousting competition on the grounds in addition to numerous other events and parties.

Ultimately, the measure of success of this project depends not on the demands of domestic life but rather on its narrative and interactive possibilities. If Garriott manages to complete Mark III and turns it into his Austin residence, what will it be like living in the ultimate fun house?

"Same as living here," he says from a comfortable chair in his quite comfortable living room in Mark II.

Even given the almost total dedication of the structure over to folly and fun, the operation of the building as a home will remain in tact. At the same time, Garriott recognizes that despite the ability of Mark III to function as a home, the material focus on

fun creates folly at such scale as to make it *sui generis*. Along those lines, Garriott admits the idea of giving the building and its grounds to the city as a legacy remains a possibility—the house that fun built standing in perpetuity, a monument to fun.



Figure 13: Britannia Manor Mark III, construction site, January 2012.

VI. CONCLUSIONS

What makes a place fun?

The current review of literature, development of a method based on the language of games and its application to a series of case study homes offers a preliminary answer to the overarching question raised in this research: What makes a place fun?

Fun, as constructed, creates playful ambiguities in the mind of the participant through the creation of an is/is not contradiction in the perceptions of the world. Fun as a condition imbibes architectural design, architectural construction, our perceptions of and our use of place. But all fun is not created equally, and a critical language of fun is necessary to engage in discussion and descriptions of why some things are more fun, or at least different, than others. That is to say, a backyard swing is not fun in same way that Disneyland is.

The critical language of games offers a way of talking about both the relative success as well as the meaningful differences between various types of games as machines for generating fun. And borrowing this language, and connecting it to the study of place, outlines a method for talking about fun in and around human environment. Looking more closely at the notion of the American home through this language demonstrates the value of the method. The language of fun helps advance the discussion of fun and place first by bringing the topic back from the margins of architectural discourse and next by offering new points of attachment for inquiry. The critical terms proposed each suggest a line of analysis and taken together promise the possibility of a system of understanding. So whether or not this subject was explored in all the depth that

it deserves, the current approach points to a green field of new research opportunities—the *ludus loci*.

Still, as a preliminary inquiry into a relatively unexplored area, several key questions have yet to be answered:

- If the folly is best organized by the notion of fun, why does the orthodoxy of architectural theory and history marginalize the form?
- And while marginalized, why has the orthodoxy of architecture not fully excluded the folly? What is it about folly that demands a place at the margin of theory?
- Further, how does the notion of the “fun house” play out in different contemporary cultures?
- How did the notion of fun develop? Are there cultural roots of environmental fun outside of the European and American traditions?
- What makes other types of places fun? Fun work places? Fun airports? Fun playgrounds, parks and public spaces?
- Does the vocabulary of fun provide additional insight into the nature and function of places designed for fun, such as theme parks and sports stadiums?
- How can the vocabulary of fun as developed, be used as an evaluative system of quality? In other words, is there aesthetics of fun?
- And, of central importance, what are the limits of fun places? What should those limits be?

The last two questions hold special weight. Because while this research has argued about the scope of fun places, often coded as “folly”, it has never clearly placed a value on the notion of fun. Are we living in defiance of our Puritan forbearers, honoring a

tradition of play and ignoring work? Paraphrasing Neil Postman's critique of television, "Are we amusing ourselves to death?" Or is play a critical evolutionary habit that should be cultivated? Is it somehow essential our mental health and well being? (Brown and Vaughan 2009; McGonigal 2011; Sutton-Smith 1997, and others). Or are we simply following some sort of version of the post-modern turn, living in a Ludic Age where context, ambiguity and play simply reflect the zeitgeist? Perhaps it is a little of all three.

As we turn from descriptive qualities of a language of environmental fun, of ludic space, to more evaluative systems, not only do we raise social questions of utility and good, we naturally raise questions of design. What should we build and how? To answer these questions we need to turn to the open issues of fun, the social value of fun and of the design of fun.

Researching Fun

While this research operationalizes a definition of fun to talk about a specific kind of is/not is contradiction, ambiguity or disjunction, further research along these lines would help clarify the concept. Several key issues related to fun have yet to be resolved.

Clearly, not everything that is ambiguous is fun. Plenty of ambiguity is frustrating or simply a smokescreen for lies. When stamped concrete mimics brick, is the result fun, or simply a cheap lie? When a door does not clearly afford pushing or pulling to open it, does the ambiguity do more than generate annoyance and anger?

Further, not every is/not is contradiction is fun. To a prisoner, the jail cell is home. But it is not home. Nor is it any fun at all. So, either the specific nature of the is/not is contradiction has not been described in enough detail to clarify why jail is not

fun, or there is more to fun than the is/not is construction. Fun is linked to the is/is not.

But additional clarification is needed.

Some of this clarity might come through bridgeworks between the novel notion of fun proposed in this research and some of the more established play literature.

For example, Sutton-Smith has summarized the ambiguity of play concept by borrowing from art and theater, biology and animal behavior, philosophy and literary criticism. Where Sutton-Smith ties these disciplinary threads into play, it remains to tie together these various forms of ambiguity into a better developed concept of fun.

We might, to illustrate, reconcile notions of fun with the psychological roots of human play described by D.W. Winnicott and his notion of “transitional objects”. His point of view, in summary, holds:

“Of every individual who has reached to the stage of being a unit with a limiting membrane and outside and an inside, it can be said there is an inner reality to that individual, an inner world...(If there is need for this double statement, there is also need for a triple one: the third part of the life of a human being...an intermediate area of experiencing, to which inner reality and external life both contribute. It is an area that is not challenged. Because no claim is made on its behalf except that it shall exist as a resting-place for the individual engaged in the perpetual human task of keeping inner and outer reality separated, yet interrelated.

“It is usual to refer to ‘reality-testing’, and to make a clear distinction between apperception and perception. I am here staking a claim for an intermediate state between a baby’s inability and his growing ability to recognize and accept reality. I am therefore studying the substance of illusion, that which is allowed to the infant, and which in adult life is inherent in art and religion....”(Winnicott 1971, 2-3)

Between the reality of the external world and the reality of the internal world sits a third state which he describes as “illusion.” It is hard not to recall Caillois point that illusion, at its root, means “at play.” For Winnicott, this intermediate state is the source of play. And when he discusses transitional objects, such as soft toys and hems of blankets,

and the means by which the infant explores the relationship between the internal (subjective) reality and the external (objective) reality, it seems clear he is describing the ur-machine of play.

Without stating so, Winnicott's transitional object appears to mirror the is/is not notion of fun—the thing that holds the subjective and the objective in careful stasis. Does this bridge the current research into a more psychological understanding of fun and place? Perhaps. More important, even a consideration of this linkage shows an opportunity to recontextualize the vocabulary of environmental fun in a more psychological frame.

At every turn, the concept of fun demands an integrated study of fun. Where the current research provides anchors for a “funological” analysis of place, there is clearly more work to be done at the universal level.

The Social Function of Fun

In his explication of Henri Lefebvre's “The Production of Space”, Edward Soja focuses on Lefebvre's approach to the simple rational dialectic of a spatial this or that, by providing a third perspective. Soja, and Lefebvre seek to open up an understanding of space they see limited by a binary approach to either/or choices. Soja argues that this thirding of the traditional dialectic is more than a Hegelian reduction to a synthesis, a compromise. Rather, Soja's third is not a distillation of the opposing extremes, but a moment of freedom and possibility. When Soja describes this concept in terms of geography, the “thirdspace” he states:

“...the space where all places are, capable of being seen from every angle, each standing clear; but also a secret and conjectured object, filled with illusions and allusions, a space that is common to all of us yet never able to

be completely seen and understood, an 'unimaginable universe,' or as Lefebvre would put it, 'the most general of products.'"(Soja 1996, 56)

This poetic attempt to capture the concept Soja seeks to define could work as a definition of spatial fun. At the very least, the notion of thirdsapce as linked to "illusion" now conjures both Caillois' and Winnicott's notions of play. At the very least, Soja's analysis appears to capture things outside those of the commonly understood notion of fun. He uses third space (lived space) to challenge the power structures of what he describes as first space (perceived space) and second space (conceived space), a twist on the concept of emancipation and an open platform for re-examining human geography and meaning. In a quick sketch, Soja sees the space of our sensorial perception and the conceived space as it is defined for us through culture coming through the ambiguous thirding of lived space, or the "most general of products."

While it is beyond the scope of the current summary to attempt to reconcile Soja's reading of Lefebvre's work with Caillois, Winnicott or the overall thrust of the current characterization of fun and folly, the parallels invite further investigation.

For now, Soja's liminal play with notions of space raises a tantalizing possibility around fun: Is there more to the is/is not contradiction in terms of place? Is fun a facet of a broader condition, an instance of the post modern experience? Does fun encompasses more than leisure and escape, frivolity and delight? Is fun an important critical concept?

More so than other questions considered in this research, the possible role of fun as a social concept seems to be the most import and interesting implication.

Is fun a fount of freedom? Does the play of games entice a play of mind that teaches contingency, ambiguity, construction and strategy, defiance and acceptance of evolving opportunities? Can play lead us to accept and master the highest intentions of

the Marxist critique, feminism, post-colonial morality, the progressive ideals of environmentalism and an escape from the homotopia?

In his book “How To Do Things With Videogames”, Ian Bogost provides twenty examples that, taken together, provide an argument that games can do more than serve up entertainment. (Bogost 2011) Games can educate, illuminate, edify, inspire, pacify, and persuade. And while Bogost never bothers to put a finger on what it is about games that allow them work as a medium for so many different purposes, from pranks and art to political rhetoric and fitness—there is something special about games that holds them together at their center. In this research, I have argued that the central notion of games is fun, and the notion of the game can best be described as a machine for generating fun. Applied to Bogost’s analysis, the question of social function becomes even more tantalizing. Perhaps games can operate as sophisticated culture machines, through their fun function, to impact all manner of serious, and not so serious, ends.

Of course, these are merely possibilities. But simply playing with the notion of fun seems to illustrate the value in the experience. When people can play in a free space, constrained by directive rules, they experience something sublime and valuable. We have spent the entirety of human civilization playing games, creating fun. Perhaps in our cybernated, information-saturated, contingent post-modern condition, fun has arrived in its full potency to help us understand ourselves.

Remarkably, if this is the case, then the study of fun remains one of the most important philosophical and sociological tasks left to theory in the 21st century. However, if fun is just for, well, fun, then that’s fine too.

Everyone needs a chance to have a little fun.

Design

The cases studies examined in this research help demonstrate the value of the current method—expanding the vocabulary of architectural criticism and design to include terms focused on fun. Recuperating the image of the folly in architectural literature now seems possible. Further, many examples of exotic, weird, fantastic and simply fun architecture can stand side-by-side for further scrutiny and discussion. If folly is something other than quasi-architecture, then it can become the legitimate domain of study for history, criticism and design.

But to get the more primary questions of design, we must first encounter the issue of the informal design that haunts the folly.

While game design clearly has evolved some complex, and in certain cases, sophisticated methods for talking about and constructing games, fun places appear to emerge from a less structured point of origin. Even in the case of Disneyland and IKEA, the design principles at work seem to have more in common with cinema and theater than games. There is a suggestion that the play of place requires a certain freedom of mind, and possibly of design, to achieve the desired outcome of fun.

And while this might point to the futility of using games as a model for talking about fun architecture, the opposite might be true. As this research has argued, there is a critical lack of terms in architectural dialog around fun. So, we would expect to see an informal or borrowed approach when we turn to the design of fun places.

Of course, this is only speculation at this point. A demonstration of the critical vocabulary of fun as a design language would work to argue the point that these terms are

more useful to environmental understanding than it might first seem. Along those lines, a future project might:

- Elaborate the critical terms presented here as a design vocabulary, detailing specific design approaches and problems.
- Outline a design approach to fun objects, including architecture.
- Propose designs for fun places.
- Evaluate the quality of these designs.

So, for example, rather than simply talk about the function of time in games, and how it might work in designed environmental space, a critical design approach might:

- Look at the notion of time as structured by the notion of turns.
- Invent methods for implementing the turn concept in the exploration of a place—like a museum.
- Design an intervention in a museum that takes the visitors through an exhibit, toward a goal, using turns.
- Implement and evaluate whether or not the turn-focused environmental intervention was any fun.

This sketched approach suggests a possible praxis between the descriptive background provided in this research and an approach focused on applying it to the design of place. And, of course, in this example, a small portion of a single term is used as a design challenge. A more significant design approach would be to create a fully functioning fun place on the basis of the analysis of place provided here. Much as Richard Garriott recognized design limitations in his Britannia Manor Mark II home that encouraged him to start construction on a home fully dedicated to the concept of fun, so

might a design project set out to create an archetypical fun house—procedurally deep and narratively connected, with obvious and interactive interfaces, a playful sense of time, a clear role for the player and goals with lusory means to the end defined. In short, a design for a place filtered through the language of games that succeeded in creating a notable fun place would provide the most obvious argument in support of the proposed method of analysis.

The Authentic and Fun

Haunting the study of fun is the presence of beauty. As the primary aesthetic approach to non-rational experience in the west, at least since Kant, beauty stalks the study of fun. Where “pure reason” provides the rational basis of western understanding, the beautiful and the sublime have provided an ineffable category of experience connected to, but outside of, the primary system of understanding.

No wonder that in recent years games have petitioned for a place at the art table. The experience of playing a game is decidedly non-rational. It does not make phenomenological sense to pretend to hunt food and eat in the videogame Skyrim. But players perform these acts with the same earnest attachment with which they survey the game’s distant peaks and valleys. And while the experience may touch on questions of the beautiful and the sublime, players play the game not for these aesthetic reasons, but to have fun.

A potentially trivial distinction in player motivations becomes a critical issue when you consider the concept of beauty next to fun. Where beauty is a certain anchor in the rational facts of the world, fun provides a contingent, in this research, ambiguous

construction that seems ill at ease in a certain system of western philosophy. The assertion here is that questions of beauty are contradicted by questions of fun.

In this sense, fun may very be considered a new aesthetic category.²¹ Where beauty relates to truth, fun relates to deliberate uncertainty.

When turning back to place, this line of thought challenges some deeply held notions about the importance of the authentic in architecture. Questions about the truth in the façade of a building or about a-historical architectural details—such a faux-brick plastered onto to wood frame construction or a Mansard roof draped over a suburban American home—continue to drive the discourse around authenticity. And while these discussions revolve around philosophical questions of the beautiful and the true, the consideration of the intentional ambiguity and contradictions of fun raise a tantalizing possibility. The brick wall that is not a brick wall, and the French maison that is not a French maison become intentionally contradictory features in a machine meant to evoke fun. Whether this contradiction occurs as a counterpoint to the true and the authentic remains an open question. But the intentional pursuit of ambiguity suggests a new set of philosophical operators at work, challenging classical notions of architectural perception and meaning

The Ludic Age

If we have experienced a “ludic turn” in culture, as Sutton-Smith has suggested or have more grandly entered “The Ludic Age” as Zimmerman has claimed, then the study of fun places should be viewed in the context of resituating architectural theory in terms

²¹ This suggestion was original made by Amir Amiri in conversations we had on the subject of fun.

of the demands of a new age. Whether that is forward-looking, in terms of design approaches, or back-looking in terms of critical and historical work, the role of fun works more as a theory of culture than anything else.

And while this study does not need to make or even explore this claim in depth, it does have a few specific implications for the conclusions reached so far. First, the study of games, games and place or places on their own should be considered in context together. There is no reason to consider “game-like elements” in a building for instance. That approach only suggests a creative borrowing across disciplines. But to recognize an underlying ludus, the study of fun in buildings should build upon the same theory of fun in games. What is currently missing, as been pointed out, is a more comprehensive theory of fun or at least a study of fun objects.

Second, a more holistic view of games and fun in culture also suggests that human environments will both sublimate and develop these elements in an integrated manner. It makes no more sense to point specific features in a building and say, “A steeple represents the power of the church” than to say, “A plastic tree makes a house fun.” In both cases, the feature must work in a broader system of culture and context to succeed. Steeples may very well be a part of the presentation of power wielded by the church and cathedral building in the same way that a plastic jungle might operate piece of a fun machine represented by the entire building. Atomic vocabularies risk unnecessary reduction.

The mere possibility of a Ludic Age, or even a comprehensive ludic field of theory, argues that the current atomistic approach to understanding games, and architecture along the way, is only a step toward a more complete theory.

Looking at follies as fun buildings is a starting point. Understanding the folly tradition as a series of transgressions signaling a coming epistemic shift in culture is a bigger, and more important argument that remains to be made.

For now, with some of the tools of fun in hand, we can conceptualize a program of inquiry to test the theory of the Ludic Age and, in the scope of this search, look for the features of that age in the buildings we build and use.

REFERENCES

- Aarseth, Espen. 2000. "Allegories of Space: The Question of Spatiality in Computer Games." In *Cybertext Yearbook 2000*, edited by Raine Koskimaa. Jyväskylä Markku Eskelinen. Finland: University of Jyväskylä.
- Aarseth, Espen, Solveig Marie Smedstad, and Lise Sunnanå. 2003. A multidimensional typology of games. In *Level Up Conference Proceedings: Proceedings of the 2003 Digital Games Research Association Conference*. Utrecht: University of Utrecht.
- Alison, Jane, and Barbican Art Gallery. 2007. *Future city : experiment and utopia in architecture*. New York: Thames & Hudson.
- Archer, B. J., Anthony Vidler, Leo Castelli Gallery., and James Corcoran Gallery. 1983. *Follies : architecture for the late-twentieth-century landscape*. New York: Rizzoli.
- Atkins, Barry. 2003. *More than a game : the computer game as fictional form*. Manchester, UK ; New York, NY: Manchester University Press ;.
- Bannatyne, Lesley Pratt. 2011. *Halloween nation : behind the scenes of America's fright night*. Gretna, La.: Pelican Pub. Co.
- Barrett, Steven M. 2009. *Disneyland's hidden mickeys : a field guide to the disneyland resort's best kept secrets*. 2nd ed. Branford, CT: Intrepid Traveler.
- Bateson, Gregory. 1972. *Steps to an ecology of mind; collected essays in anthropology, psychiatry, evolution, and epistemology, Chandler publications for health sciences*. San Francisco,: Chandler Pub. Co.
- Becker-Ho, Alice, and Guy Debord. 2007. *A game of war*. London: Atlas.
- Bell, Claudia, and John Lyall. 2005. "Tourist Performers at the Crazy House, Dalat, Vietnam." *Continuum* no. 19 (2):285-297. doi: 10.1080/10304310500084657.
- Benedikt, Michael. 1991. *Cyberspace : first steps*. Cambridge, Mass.: MIT Press.
- Bernstein, Fred A. 2008. "A House Not for Mere Mortals." *New York Times*.
- Bjork, Staffan, and Jussi Holopainen. 2005. *Patterns in game design*. 1st ed, *Charles River Media game development series*. Hingham, Mass.: Charles River Media.
- Blackstone, W., and W.C. Jones. 1916. *Commentaries on the laws of England*: Bancroft-Whitney company.
- Bogost, Ian. 2007. *Persuasive games : the expressive power of videogames*. Cambridge, MA: MIT Press.
- . *Videogames are a Mess: My DiGRA 2009 Keynote, on Videogames and Ontology 2009* [cited March 8, 210. Available from http://www.bogost.com/writing/videogames_are_a_mess.shtml].
- . 2011. *How to do things with videogames, Electronic mediations*. Minneapolis: University of Minnesota Press.
- Boroditsky, Lera, Michael Ramscar, and Michael C. Frank. 2002. "The roles of body and mind in abstract thought." *Psychological Science* no. 13 (185-189).
- Borries, Friedrich von, Steffen P Walz, and Matthias Böttger. 2007. *Space time play : computer games, architecture and urbanism: the next level*. 1st ed. Boston, MA: Birkhauser Verlag AG.

- Brown, Stuart L., and Christopher C. Vaughan. 2009. *Play : how it shapes the brain, opens the imagination, and invigorates the soul*. New York: Avery.
- Burns, Charlotte. 2010. "Ikea adds culture to shopping experience." *Art newspaper*, 2.1.2010.
- Caillois, Roger. 2001. *Man, play, and games*. Translated by Meyer Barash. Urbana: University of Illinois Press. Original edition, 1961.
- Castronova, Edward. 2007. *Exodus to the virtual world : how online fun is changing reality*. New York: Palgrave Macmillan.
- Cattermole, Paul, and Ian Westwell. 2007. *Bizarre buildings*. Buffalo: Firefly Books.
- Chicago, Skydeck. 2011. *Skydeck* 2009 [cited 2/20/2011 2011]. Available from <http://www.theskydeck.com/>.
- Collins, George R. 1968. "The Visionary Tradition in Architecture." *The Metropolitan Museum of Art Bulletin* no. 26 (8):310-321.
- Collins, Lauren. 2011. House Perfect; Is the IKEA ethos comfy or creepy? *The New Yorker*, Oct 3, 2011, FACT; A Reporter At Large; Pg. 55.
- Conrads, Ulrich, and Hans Günther Sperlich. 1962. *The architecture of fantasy: utopian building and planning in modern times*. New York,: Praeger.
- Cook, Dan. 2011. *What are game mechanics?* [Web page] 2006 [cited August 27 2011]. Available from <http://www.lostgarden.com/2006/10/what-are-game-mechanics.html>.
- Costikyan, Greg. 2002. I Have No Words & I Must Design: Toward a Critical Vocabulary for Games. Paper read at Computer Games and Digital Cultures Conference, at Tampere.
- Craig, Steve. 2002. *Sports and games of the ancients, Sports and games through history*. Westport, Conn.: Greenwood Press.
- Crawford, Chris. 2002. *The art of interactive design : a euphonious and illuminating guide to building successful software*, June 2002. San Francisco: No Starch Press.
- . 2003. *Chris Crawford on game design*. Indianapolis, Ind.: New Riders.
- . 2005. *Chris Crawford on interactive storytelling*. Berkeley, CA: New Riders.
- Curl, James Stevens, and John J. Sambrook. 1999. *A dictionary of architecture*. Oxford ; New York: Oxford University Press.
- Debord, Guy. None. *Society of the Spectacle*. Translated by Ken Knabb. London: Rebel Press.
- Djaouti, Damien, Julian Alvarez, Jean-Pierre Jessel, Gilles Methel, and Pierre Molinier. 2008. "A Gameplay Definition through Videogame Classification." *International Journal of Computer Games Technology* no. 2008:1-8. doi: 10.1155/2008/470350.
- Downing, A. J. 1969. *The architecture of country houses; including designs for cottages, and farmhouses, and villas, with remarks on interiors, furniture, and the best modes of warming and ventilating*. New York: Dover Publications.
- Dunlop, Beth. 1996. *Building a dream : the art of Disney architecture*. New York: Abrams.
- Dupont, Jim. 2011. *Castles of the United States* [cited 12.28.11 2011]. Available from <http://dupontcastle.com/castles/index.htm>.
- "folly, n.1". 2011. In *Oxford English Dictionary*: Oxford University Press.

- Frasca, Gonzalo. 2003. Ludologists love stories, too: notes from a debate that never took place. In *Level Up Conference Proceedings*. Utrecht: University of Utrecht.
- Fright Nights*. 2011. [Web page] 2011 [cited 12.23.2011 2011]. Available from http://winchestermysteryhouse.com/frightnights.cfm?id_fags=45&sortnum=1#faq_s.
- Galloway, Alexander R. 2006. *Gaming : essays on algorithmic culture, Electronic mediations*. Minneapolis: University of Minnesota Press.
- Gee, James Paul. 2007. *What video games have to teach us about learning and literacy*. Rev. and updated ed. New York: Palgrave Macmillan.
- Goff, Bruce, Pauline A. Saliga, Mary Woolever, and David Gilson De Long. 1995. *The architecture of Bruce Goff, 1904-1982 : design for the continuous present*. Munich ; New York; Chicago: Prestel ; Art Institute of Chicago.
- Gotz, Ulrich. 2007. "Load and support: Architectural realism in video games." In *Space time play : computer games, architecture and urbanism: the next level*, edited by Friedrich von Borries, Steffen P Walz and Matthias Böttger, 134-137. Boston, MA: Birkhauser Verlag AG.
- Hayward, Gallery, Neil R. Bingham, England Arts Council of, Art Northern Gallery for Contemporary, Walsall New Art Gallery, Gallery Harris Museum and Art, Lowry, Architects Royal Institute of British, and Exhibitions National Touring. 2004. *Fantasy architecture : 1500-2036*. London: Hayward Gallery in association with the Royal Institute of British Architects.
- Headley, Gwyn. 1996. *Architectural follies in America*. New York: John Wiley & Sons.
- Hench, John, and Peggy Van Pelt. 2003. *Designing Disney : imagineering and the art of the show*. 1st ed. New York: Disney Editions.
- Higgins, Dick, and Wolf Vostell. 1971. *Fantastic architecture*. 1 vols. New York: Something Else Press.
- The House*. 2011. [Web page] 2011 [cited 12.23.2011 2011]. Available from <http://winchestermysteryhouse.com/thehouse.cfm>.
- Howland, Dan. 2004. *The Journal of Ride Theory Omnibus*. Third edition ed. Portland, OR: Ride Theory Press.
- Huizinga, Johan. 1955. *Homo ludens; a study of the play-element in culture*. Boston,,: Beacon Press.
- Hunicke, Robin, Marc LeBlanc, and Robert Zubin. MDA: A Formal Approach to Game Design and Game Research <http://www.cs.northwestern.edu/~hunicke/MDA.pdf>.
- Ignoffo, Mary Jo. 2010. *Captive of the Labyrinth: Sarah L. Winchester, Heiress to the Rifle Fortune*. Columbia and London: University of Missouri Press.
- IKEA. 2011a. 2012 IKEA Catalog. Inter IKEA Systems.
- . 2011. *Facts and Figures*. IKEA 2011b [cited 12.31.2011 2011]. Available from <http://franchisor.ikea.com/showContent.asp?swfId=facts9>.
- Jantzen, Michael. 2012. 2012 [cited March 26, 2012 2012]. Available from <http://www.michaeljantzen.com/>.
- Järvinen, Aki. 2007. Introducing Applied Ludology: Hands-on Methods for Game Studies. In *Situated Play: Proceedings of the 2007 Digital Games Research Association Conference*. Tokyo: The University of Tokyo.
- Jones, Barbara Mildred. 1974. *Follies & grottoes*. 2nd ed. London: Constable.

- Judd, Dennis R. 2003. *The infrastructure of play : building the tourist city, Cities and contemporary society*. Armonk, N.Y.: M.E. Sharpe.
- Julian Alvarez, Damien Djaouti, Rashid Ghassempouri, Jean-Pierre Jessel, Gilles Methel. 2006. Morphological study of the video games. Paper read at Australasian Conference On Interactive Entertainment, at Perth, Australia.
- Juul, Jesper. 2004. "Introduction to game time." In *First person : new media as story, performance, and game*, edited by Noah Wardrip-Fruin and Pat Harrigan, xiii, 331 p. Cambridge, Mass.: MIT Press.
- . 2005. *Half-real : video games between real rules and fictional worlds*. Cambridge, Mass.: MIT Press.
- King, Brad, and John Borland. 2003. *Dungeons and dreamers : the rise of computer game culture : from geek to chic*. Emeryville, Calif.: McGraw-Hill/Osborne.
- Klabbers, Jan H.G. 2003. The gaming landscape: a taxonomy for classifying games and simulations. In *Level Up Conference Proceedings: Proceedings of the 2003 Digital Games Research Association Conference*. Utrecht: University of Utrecht.
- Konzack, Lars. 2002. Computer Game Criticism: A Method for Computer Game Analysis. In *Computer Games and Digital Cultures Conference Proceedings*. Tampere: Tampere University Press.
- Koster, Raph. 2005. *A Theory of Fun for Game Design*. Scottsdale, AZ: Paraglyph Press.
- Lakoff, George, and Mark Johnson. 1999. *Philosophy in the flesh : the embodied mind and its challenge to Western thought*. New York: Basic Books.
- Lancaster, Clay. 1960. *Architectural follies in America*. Rutland, Vt.: C. E. Tuttle Co.
- Lastowka, F. Gregory. 2010. *Virtual justice : the new laws of online worlds*. New Haven: Yale University Press.
- Linderöth, Jonas. 2010. Why gamers don't learn more An ecological approach to games as learning environments. In *Proceedings of DiGRA Nordic 2010: Experiencing Games: Games, Play, and Players*. Stockholm: University of Stockholm.
- Linderöth, Jonas, and Ulrika Bennerstedt. 2007. This is not a Door: an Ecological approach to Computer Games. In *Situated Play: Proceedings of the 2007 Digital Games Research Association Conference*. Tokyo: The University of Tokyo.
- Lindqvist, Ursula. 2009. "The Cultural Archive of the IKEA Store." *Space and Culture* no. 12 (1):43-62. doi: 10.1177/1206331208325599.
- Lobo, Daniel G. 2007. "Playing with urban life: how SimCity influences planning culture." In *Space time play: computer games, architecture and urbanism: the next level*, edited by Friedrich von Borries, Steffen P Walz and Matthias Böttger, 206-209. Boston, MA: Birkhauser Verlag AG.
- Loftus, Geoffrey R., and Elizabeth F. Loftus. 1983. *Mind at play : the psychology of video games*. New York, NY: Basic Books.
- Lukas, Scott A. 2007. *The themed space : locating culture, nation, and self*. Lanham, MD: Lexington Books.
- MacCannell, Dean. 1999. *The tourist : a new theory of the leisure class*. Berkeley: University of California Press.
- Maizels, John, Deidi von Schaewen, and Angelika Taschen. 2007. *Fantasy worlds*. Köln; Los Angeles: Taschen.

- Marling, Karal Ann. 1997. *Designing Disney's theme parks : the architecture of reassurance*. Montréal, Paris: Centre canadien d'architecture/Canadian Centre for Architecture ;.
- Martin, Jim. 1986. *Dreams Happen: Bishop Castle*.
- Mathews, Stanley. 2005. "The Fun Palace: Cedric Price's experiment in architecture and technology." *Technoetic Arts: A Journal of Speculative Research* no. 3 (2):73-91.
- . 2006. "The Fun Palace as Virtual Architecture." *Journal of Architectural Education* no. 59 (3):39-48.
- McGonigal, Jane. 2011. *Reality is broken : why games make us better and how they can change the world*. New York: Penguin Press.
- Mead, Christopher Curtis, Bart Prince, and Michele M. Penhall. 2010. *The architecture of Bart Prince : a pragmatics of place*. Rev. and updated ed. New York: W.W. Norton & Co.
- Myers, David. 2009. In search of a minimalist game. In *Breaking New Ground: Innovation in Games, Play, Practice and Theory: Proceedings of the 2009 Digital Games Research Association Conference*. London: Brunel University.
- Nesbitt, Kate. 1995. "The Sublime and Modern Architecture: Unmasking (An Aesthetic of) Abstraction." *New Literary History* no. 26 (1):95-110.
- Newman, James. 2004. *Videogames, Routledge introductions to media and communications*. London New York: Routledge.
- Nitsche, Michael. 2008. *Video game spaces : image, play, and structure in 3D worlds*. Cambridge, MA: MIT Press.
- Norman, Donald A. 1999. "Affordance, conventions, and design." *interactions* no. 6 (3):38-43. doi: 10.1145/301153.301168.
- Paglen, Trevor. 2009. *Blank spots on the map : the dark geography of the Pentagon's secret world*. New York: Dutton.
- Parlett, David Sidney. 1999. *The Oxford history of board games*. Oxford ; New York: Oxford University Press.
- Pearce, Celia. 1997. *The interactive book : a guide to the interactive revolution*. Indianapolis: Macmillan Technical Publishing.
- . 2005. Theory Wars: An Argument Against Arguments in the so-called Ludology/Narratology Debate. In *Changing Views: Worlds in Play*. Vancouver: University of Vancouver.
- . 2009. *Communities of play : emergent cultures in multiplayer games and virtual worlds*. Cambridge, Mass.: MIT Press.
- Penprase, Bryan E. 2011. "The Archaeoastronomy of Modern Civilization." In *The Power of Stars*, 229-256. Springer New York.
- Perla, Peter P. 1990. *The art of wargaming : a guide for professionals and hobbyists*. Annapolis, Md.: Naval Institute Press.
- Pinchbeck, Dan. 2009. An affordance based model for gameplay. In *Breaking New Ground: Innovation in Games, Play, Practice and Theory: Proceedings of the 2009 Digital Games Research Association Conference*. London: Brunel University.
- Psarra, S. 2009. *Architecture and narrative: the formation of space and cultural meaning*: Routledge.

- Restany, Pierre, and Hundertwasser. 1998. *Hundertwasser : the painter-king with the 5 skins : the power of art*. Köln ; London: Taschen.
- Rollings, Andrew, and Ernest Adams. 2003. *Andrew Rollings and Ernest Adams on game design*. 1st ed. Indianapolis, Ind.: New Riders.
- Rybczynski, Witold. 1987. *Home : a short history of an idea*. New York, NY: Penguin Books.
- Sakey, Matthew. 2010. *There Are No Words (Yet): The Desperately Incomplete Language of Gaming*. International Game Developers Association 2002 [cited September 26 2010]. Available from http://archives.igda.org/articles/msakey_language.php.
- Salen, Katie, and Eric Zimmerman. 2003. *Rules of play : game design fundamentals*. Cambridge, Mass.: MIT Press.
- Schuyt, Michael, Joost Elffers, and George R. Collins. 1980. *Fantastic architecture : personal and eccentric visions*. New York: H. N. Abrams.
- Shepherd, Paul. 1994. *What is architecture? : an essay on landscapes, buildings, and machines*. Cambridge, Mass.: MIT Press.
- Smith, Albert C. 2004. *Architectural model as machine : a new view of models from antiquity to the present day*. Amsterdam; Boston: Elsevier, Architectural Press.
- Soja, Edward W. 1996. *Thirdspace : journeys to Los Angeles and other real-and-imagined places*. Cambridge, Mass.: Blackwell.
- Solomon. 1999. *Coney Island*. Baltimore, MD: Top Hat Press.
- Solomon, Susan G. 2005. *American playgrounds : revitalizing community space*. Hanover N.H.: University Press of New England.
- Spariosu, Mihai. 1989. *Dionysus reborn : play and the aesthetic dimension in modern philosophical and scientific discourse*. Ithaca, N.Y.: Cornell University Press.
- Special Events. 2011. [Web page] 2011 [cited 12.23.2011 2011]. Available from <http://winchestermysteryhouse.com/specialevents.cfm>.
- Stenros, Jaakko, Markus Montola, Frans M., and yr. 2007. Pervasive games in ludic society. In *Proceedings of the 2007 conference on Future Play*. Toronto, Canada: ACM.
- Stoetzel, Paul von. 2010. Scrap.
- Strodder, Chris. 2008. *The Disneyland encyclopedia : the unofficial, unauthorized, and unprecedented history of every land, attraction, restaurant, shop, and event in the original Magic Kingdom*. Santa Monica, CA: Santa Monica Press.
- Suits, Bernard Herbert. 2005. *The grasshopper : games, life and utopia*. Peterborough, Ont.: Broadview Press.
- Sutton-Smith, Brian. 1997. *The Ambiguity of Play*. Cambridge, Mass.: Harvard University Press.
- Thomas, David. 2003. Critical Game Elements: A Vocabulary of Experience, poster presented at Level Up, Digital Games Research Association member conference. Utrecht: University of Utrecht.
- . 2007. "SimCity: Simulating Nothing." In *Space time play : computer games, architecture and urbanism: the next level*, edited by Friedrich von Borries, Steffen P Walz and Matthias Böttger, 210-211. Boston, MA: Birkhauser Verlag AG.

- Thomas, David, and Gary Haussmann. 2005. Cinematic Camera as Videogame Cliché. In *Changing Views: Worlds in Play: Proceedings of the 2005 Digital Games Research Association Conference*. Vancouver: University of Vancouver.
- Thomas, David, Kyle Orland, and Scott Steinberg. 2007. *The Videogame Style Guide and Reference Manual*. 1st edition ed: Lulu.com.
- Thomas, David, José P. Zagal, Margaret Robertson, Ian Bogost, and William Huber. 2009. You Played That? Game Studies Meets Game Criticism. In *Breaking New Ground: Innovation in Games, Play, Practice and Theory: Proceedings of the 2009 Digital Games Research Association Conference*. London: Brunel University.
- Torekull, Bertil, and Ingvar Kamprad. 1999. *Leading by design : the IKEA story*. New York: HarperBusiness.
- Urry, John. 2002. *The tourist gaze*. 2nd ed. London ; Thousand Oaks, Calif.: Sage Publications.
- Vidler, Anthony. 1992a. *The architectural uncanny : essays in the modern unhomely*. Cambridge, Mass.: MIT Press.
- . 1992b. "History, Criticism and Theory." *Lotus international*. (May):130-34.
- Walker, R. F. 1972. "Hubert de Burgh and Wales, 1218-1232." *The English Historical Review* no. 87 (344):465-494.
- Walther, Bo Kampmann. 2007. "Pervasive gamespaces: Gameplay out in the open." In *Space time play : computer games, architecture and urbanism: the next level*, edited by Friedrich von Borries, Steffen P Walz and Matthias Böttger, 290-293. Boston, MA: Birkhauser Verlag AG.
- Walz, Steffen P. *Toward a Ludic Architecture : The Space of Play and Games*. 1.0th ed. Pittsburgh, PA: ETC Press.
- Welcome to Neuschwanstein Castle*. 2011. Bayerische Verwaltung der staatlichen Schlösser, Gärten und Seen 2011 [cited 12.29.11 2011]. Available from <http://www.neuschwanstein.de/englisch/palace/index.htm>.
- White, William. 1878. *Notes and queries*: Oxford University Press.
- Wigley, Mark. 1992. "Untitled: The Housing of Gender." In *Sexuality & space*, edited by Beatriz Colomina, 326 - 389. New York, N.Y.: Princeton Architectural Press.
- Wigley, Mark, Constant, and Centrum voor hedendaagse kunst Witte de With. 1998. *Constant's New Babylon : the hyper-architecture of desire*. Rotterdam: Witte de With, Center for Contemporary Art : 010 Publishers.
- Wilkins, Sally. 2002. *Sports and games of medieval cultures, Sports and games through history*. Westport, Conn.: Greenwood Press.
- Williams, Tony. 2000. "Thresholds of Desire and Domestic Space in Nineteenth-Century French Fiction." In *Secret spaces, forbidden places : rethinking culture*, edited by Fran Lloyd and Catherine O'Brien. New York: Berghahn Books.
- Winnicott, D. W. 1971. *Playing and reality*. New York,: Basic Books.
- Wolf, Mark J. P. 2001. *The medium of the video game*. 1st ed. Austin: University of Texas Press.
- Zagal, José P. 2011. *Game Ontology Project Wiki* 2006 [cited 6/12/2011 2011].
- Zagal, José P., and Michael Mateas. 2010. "Time in Video Games: A Survey and Analysis." *Simulation & Gaming*. doi: 10.1177/1046878110375594.

Zagal, José P., Michael Mateas, Clara Fernandez-Vara, Brian Hochhalter, and Nolan Lichti. 2005. Towards an Ontological Language for Game Analysis. Paper read at Changing Views – Worlds in Play, at Vancouver, BC.

